

TSD File Inventory Index

Date: September 9, 2010

Initial: C. McKenna

Facility Name: <u>Law Wie Kee (Carmichael Park / Two Teller Site)</u>	
Facility Identification Number: <u>110 904 839 159</u>	
A.1 General Correspondence	B.2 Permit Docket (B.1.2)
A.2 Part A / Interim Status	.1 Correspondence
.1 Correspondence	.2 All Other Permitting Documents (Not Part of the ARA)
.2 Notification and Acknowledgment	C.1 Compliance - (Inspection Reports)
.3 Part A Application and Amendments	C.2 Compliance/Enforcement
.4 Financial Insurance (Sudden, Non Sudden)	.1 Land Disposal Restriction Notifications
.5 Change Under Interim Status Requests	.2 Import/Export Notifications
.6 Annual and Biennial Reports	C.3 FOIA Exemptions - Non-Releasable Documents
A.3 Groundwater Monitoring	D.1 Corrective Action/Facility Assessment
.1 Correspondence	.1 RFA Correspondence
.2 Reports	.2 Background Reports, Supporting Docs and Studies
A.4 Closure/Post Closure	.3 State Prelim. Investigation Memos
.1 Correspondence	.4 RFA Reports
.2 Closure/Post Closure Plans, Certificates, etc	D. 2 Corrective Action/Facility Investigation
A.5 Ambient Air Monitoring	.1 RFI Correspondence
.1 Correspondence	.2 RFI Workplan
.2 Reports	.3 RFI Program Reports and Oversight
B.1 Administrative Record	.4 RFI Draft /Final Report
	5. RFI QAPP

Total 2.

.6 RFI QAPP Correspondence		.8 Progress Reports	
.7 Lab Data, Soil-Sampling/Groundwater	Y	D.5 Corrective Action/Enforcement	
.8 RFI Progress Reports		.1 Administrative Record 3008(h) Order	
.9 Interim Measures Correspondence		.2 Other Non-AR Documents	
.10 Interim Measures Workplan and Reports		D.6 Environmental Indicator Determinations	
D.3 Corrective Action/Remediation Study		.1 Forms/Checklists	
.1 CMS Correspondence		E. Boilers and Industrial Furnaces (BIF)	
.2 Interim Measures		.1 Correspondence	
.3 CMS Workplan		.2 Reports	
.4 CMS Draft/Final Report		F Imagery/Special Studies (Videos, photos, disks, maps, blueprints, drawings, and other special materials.)	
.5 Stabilization		G.1 Risk Assessment	
.6 CMS Progress Reports		.1 Human/Ecological Assessment	
.7 Lab Data, Soil-Sampling/Groundwater		.2 Compliance and Enforcement	
D.4 Corrective Action Remediation Implementation		.3 Enforcement Confidential	
.1 CMI Correspondence		.4 Ecological - Administrative Record	
.2 CMI Workplan		.5 Permitting	
.3 CMI Program Reports and Oversight		.6 Corrective Action Remediation Study	
.4 CMI Draft/Final Reports		.7 Corrective Action/Remediation Implementation	
.5 CMI QAPP		.8 Endangered Species Act	
.6 CMI QAPP Correspondence		.9 Environmental Justice	
1			

Note: Transmittal Letter to Be Included with Reports.

Comments: Two folders cited 6.3 documents are in separate folders

**A.1 Public
Participation**

Park District: Aurora golf course contract studied...
...page 11.

preserve levy increases...
...see page 2.

Award Winning
Newspaper
1990
Illinois Press
Association
Newspaper
Contest

Ledger-Sentinel

© Kendall County Record, Inc.

Thursday, Nov. 21, 1991

44 pages, two sections
plus one advertising section

50¢

Community
Newspaper
for Oswego,
Boulder Hill
and
Montgomery

Volume 39, Number 47

Published in Oswego, IL 60154-3

Thursday, Nov. 21, 1991

Ledger-Sentinel

11

Park district mulls Aurora golf course contract

By John Etheredge

The Oswegoland Park District may become co-owners of an Aurora golf course.

Park district commissioners are considering entering into a contract with the Fox Valley Park District that would give the local park district ownership of a portion of the Orchard Valley Golf Course.

The \$7 million 18 hole golf course, situated in the developing Orchard Valley Subdivision, is tentatively scheduled to open in July of 1993. The subdivision is located on Aurora's far west side at the corner of Galena Boulevard and Orchard Road. Primus Corporation of Oswego is developing the residential subdivision.

Park District Director Bert Gray described the proposed purchase contract as a "logical offshoot" of an agreement the two agencies negotiated nearly 12 years ago which gave them joint ownership of the Fox Bend Golf Course in Oswego.

If eventually approved by park commissioners for both agencies, Gray said the Oswegoland Park District would become a co-owner of the course.

Gray listed possible joint ownership

"I think all of them (the commissioners) are considering the facts very carefully and I can't predict at this point what their decision will be."

Bert Gray
Park District Director

advantages to the districts and local residents as follows:

- Golfers residing within the Oswegoland Park District would be able to play at the Aurora course at resident rates rather than "much higher" out of district rates;

- Joint ownership would offer the district a long term source of new "revenue production" that could be used to finance other park district projects; and,

- Joint ownership would allow both districts to maximize staff and equipment and share in bulk purchases for both Fox Bend and Orchard Valley.

Gray cited finances as the lone negative for entering into the contract. He explained that as co-owners in the course, the park district would be obligated to make payments on the contract that could extend up to 20 years.

"Money that would go towards buying into a contract would be unavailable for other purposes," Gray acknowledged.

He noted, however, that existing annual profits from Fox Bend could be the district's "main source of funding" to

make payments on an Orchard Valley contract.

Gray said he is uncertain when the five commissioners will reach a decision on this contract. He noted that officials for both park districts have periodically discussed the contract for the past several years.

He added, "I think all of them (the commissioners) are considering the facts very carefully and I can't predict at this point what their decision will be."

Beacon News 7-3-91

Toxic runoff killed fish

Expert: 'This wasn't normal happenstance'

By Paul Kelma
BEACON-NEWS STAFF

Yorkville

A toxic discharge, perhaps not man-made, stirred up by gushing water from a Sunday morning cloudburst is being blamed for a fish kill that littered the Fox River with thousands of carcasses.

The Yorkville fish kill was one of two in the Fox Valley since Sunday. The other was reported by Aurora residents at a storm water retention pond on the city's West Side.

"It's a major one. They're big and white and bloated. It's not pretty," said fish biologist Rob Miller of the Department of Conservation, after walking and boating through the river in Yorkville looking for a cause.

"This wasn't normal happenstance. It was the direct result from the runoff from an inch and-a-half of quick rain and some type of chemical," he said.

No health advisories have been issued for people catching and eating fish from the area, or for people who boat on the river who might ingest a mouthful, Miller said.

"I don't think it poses a health threat. The dilution factor was so great. If it was some sort of toxic chemical, it went through fairly fast. The fish that were unharmed didn't have a chance to accumulate it," Miller said.

"We have a saying that if the fish are healthy enough to bite, they're healthy enough to eat," he said.

The mystery cause, however, probably was not because of some man-made discharge, a spokesman for the Illinois Environmental Protection Agency said.

More than likely, a cloudburst that dumped about 1½ inches of rainfall locally on Sunday morning in about 20 minutes created a quick discharge into the river, creating a condition similar to a "convection current" that has caused fish kills in lakes, environmental field specialist Al Anderson said.

"It starts swirling and stirring up the bottom. The bottom comes up and the top goes to the bottom. In this situation, there could have been toxics associated with the bottom," he said.

Miller said he determined that the kill began at the mouth of a small, unnamed brook entering the south riverbank about three-quarters of a mile east of the Yorkville dam. The dam is about two blocks east of the Route 47 bridge.



KAREN KERCKHOVE / THE BEACON-NEWS

Helping clean dead fish from the Fox River Tuesday are Yorkville volunteers (from

left) Dale Schrack, and city councilmen Jack Jones and Bill Baird.

Volunteers clear fish from Fox

By Bill Catching
and Martha J. Mueller
BEACON-NEWS STAFF

Yorkville

About 50 volunteers, a strong sense of community spirit, equipment loans from town businesses and an extra dumpster served to rid the city's river banks of thousands of dead fish Tuesday.

By about 8 p.m., volunteers were taking it easy after the three-hour cleanup along the Fox River near the Yorkville Police Department. The group enjoyed free burgers and fries from Burger King.

Acting police chief Tom Barna and Mayor Ken Kittoe had nothing but praise for the effort.

"It's reassuring to see the volunteers come in and work like that," Barna said. "We were pretty much left on our own to clean it up, and it's certainly not a very glamorous job."

"I just don't believe the number of people that came out here, jumped in the river and started picking up dead fish," Kittoe said.

City aldermen, Bristol-Kendall fire protection volunteers, county Emergency Services and Disaster Agency volunteers — along with workers and equipment on loan from Freeman's Outdoor Sports, Willman-Groesch General Contractor and Nicholson Logging and Lumber — helped clear the mess.

◆ See Volunteers on page A6

◆ See Runoff on page A6

Runoff

◆ From page A1

"This has been as bad a kill as any since I started," said Miller, who has been stationed at nearby Silver Springs State Park for six years.

Most of the dead fish were quill-back carp suckers about 14 inches to 16 inches long. Others included "a couple" of flathead catfish, a few crawfish, some carp, a few young smallmouth bass, and several varieties of sunfish.

Of greatest concern, however, were the loss of a large portion of this year's spawn of channel catfish.

Miller said fishermen will see the immediate loss of the quill-backs. But he said the greatest loss might not be felt for four or five years, when the channel cat-

fish would have grown to catchable size.

In Aurora, a fish kill occurred Monday in a city storm water retention pond at the end of Robert Street, on the city's West Side.

Pete Sheagren, whose home at 2131 Charleston Drive backs up to the pond, said he and neighbors noticed a few fish floating on shore late Monday afternoon.

"By dusk there were many, many more. We could see some wallowing up and dying," he said.

The pond, measuring about 120 yards by 60 yards, is owned and maintained by the city in the Indian Trail West subdivision.

Steve Meyer, director of water and sewer maintenance, said city crews today would take boats to the pond and net the dead fish. The fish will be stored in plastic bags until a water chemical analysis is done to determine what might have caused the kill.

Sloven

◆ From page A1

to drag the rep conflict.

The fighting broke Thursday after forces seized the points on the Italian-Hungarian border units in the republic frustrated and is nian militiamen tactics.

Yugoslavs and fear Yugoslavia w all-out civil war lies between Serbia dragged into the c

About 11 percent of the population is Serbian. There have been widespread protests in the Serb-dominated region of Croatia, east Yugoslav republic. Some 41 people in Serbia-Croatian

Slovenia was caught in the night, although the of scattered shooting in Slovenia.

Volunteers

◆ From page A1

Bloated, dead fish had lined both banks for about one mile east of the dam by the Route 47 bridge. Toxic substances washed into the river by a heavy rain upstream were being blamed for the fish kill.

Yorkville Police Officer Barry Groesch mobilized his scout Explorer Post #1155 at about 4 p.m.

"I had to do some quick talking to get them out here," Groesch said.

Eight Explorers including Sherri Brown, 16; Molly Batterson, 14; and David Fiala, 16, said they didn't mind the work too much.

"I left before I got any dinner," Fiala said. "But then I'm glad I didn't eat anything."

Fiala and other volunteers were armed with nets, buckets, gloves and pitchforks to pick up the fish.

Two men who lived near the Fox said they just wanted to return the favor to the river that provides them with weekend fishing enjoyment. Greg Cosmutto, 30, and Monte Morgan, 24, had heard about the kill and came to lend a hand.

Meanwhile, some fishermen continued to cast their reels into the shallow river despite the cleanup around them.

Eric Dhuse, 20, said he caught some good catfish on Sunday, but didn't plan to eat anything he caught Tuesday.

Longtime resident Al Jiranek said he is concerned about herons and raccoons eating the smaller fish that also might be contaminated.

"You don't want to leave them for the animals and the garbage pickup isn't until Monday," Jiranek said. "Am I going to pollute the river if I shove them out? I mean, what are we supposed to do?"

EXPLOS

**A.2 Part A/
Interim Status**



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
RCRA ACTIVITIES
P.O. BOX A3587
CHICAGO, ILLINOIS 60690

DEC 27 1991

OSWEGOLAND PARK SIT
ATTN: R. GRAY
313 E WASHINGTON ST
OSWEGO, IL 60543

RE: EPA ID #: ILD 984 839 159

In response to your request of 11 25 91 the following
information has been updated:

Generator status changed to SMALL QUANTITY

If you have any questions, please contact me at (312) 886-6173.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sharon Kiddon".

Sharon Kiddon
RCRA Notifications Coordinator
Waste Management Division

cc: State Agency
File



OSWEGOLAND PARK DISTRICT

0938070003
KENDALL-G-

Prairie Point Center
Plainfield & Grove Roads

313 E. Washington St.
Oswego, IL 60543
(708) 554-1010

November 1, 1991

RECEIVED

NOV 25 1991

U. S. EPA, REGION V
SWB - PMS

Ms. Sharon J. Kiddon
RCRA Notifications Coordinator
U.S.E.P.A. Region 5
P.O. Box A3587
Chicago, IL 60543

RE: Site ILD984839159

Dear Ms. Kiddon:

Thank you for informing us of the assigned number for our planned clean-up at Saw Wee Kee Park.

Having reviewed your letter, I have concluded that Box 1A was incorrectly checked. The total weight of material to be removed will be over 1,000 kg., however it will not be an ongoing operation generating large amounts of hazardous waste every month. The removal will likely be finished in one month.

Please classify our site as 1B or 1C, based on whichever you feel is most appropriate.

Thanks for your assistance.

C = 1101 = 2

Sincerely,

Robert K. Gray
Executive Director

RECEIVED

NOV 18 1991

EPA-DLPC

CC John Justin Wyeth

Board of Commissioners

Robert L. Jones

President

Carroll J. Nelson

Robert K. Gray
Executive Director

William M. Figgins

Vice President

Debra D. Halley

Ginny Bateman
Director of Leisure Services

Robert K. Gray

Secretary/Treasurer

Charles Eichorst

Grant A. Casleton
Director of Operations/Development

Please refer to the instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).



Notification of Regulated Waste Activity

United States Environmental Protection Agency

Date Received
(For Official Use Only)

OCT 07 1991

I. Installation's EPA ID Number (Mark 'X' in the appropriate box)

☒

A. First Notification

☐

B. Subsequent Notification
(complete item C)

C. Installation's EPA ID Number

PMS

1 L D 9 8 4 8 3 9 1 5 9

II. Name of Installation (Include company and specific site name)

S A W W E E K E E P A R K

III. Location of Installation (Physical address not P.O. Box or Route Number)

Street

S U N D O W N L A N E

Street (continued)

City or Town

State

ZIP Code

O S W E G O

I L

6 0 5 4 3 -

County Code

County Name

K E N D A L L

IV. Installation Mailing Address (See Instructions)

Street or P.O. Box

3 1 3 E. W A S H I N G T O N S T

City or Town

State

ZIP Code

O S W E G O

I L

6 0 5 4 3 -

V. Installation Contact (Person to be contacted regarding waste activities at site)

Name (last)

(first)

G R A Y

R O B E R T

Job Title

Phone Number (area code and number)

E X E C. D I R E C T O R

7 0 8 - 5 5 4 - 1 0 1 0

VI. Installation Contact Address (See Instructions)

A. Contact Address
Location Mailing

B. Street or P.O. Box

X

City or Town

State

ZIP Code

VII. Ownership (See Instructions)

A. Name of Installation's Legal Owner

O S W E G O L A N D P A R K D I S T R I C T

Street, P.O. Box, or Route Number

3 1 3 E. W A S H I N G T O N S T

City or Town

State

ZIP Code

O S W E G O

I L

6 0 5 4 3 -

Phone Number (area code and number)

7 0 8 - 5 5 4 - 1 0 1 0

B. Land Type

C. Owner Type

D. Change of Owner Indicator

(Date Changed)

D

D

Yes

No

Month

Day

Year

RECEIVED

SEP 27 1991

IEPA-DLPC

ID - For Official Use Only

VIII. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. Refer to instructions.)

A. Hazardous Waste Activity

1. Generator (See Instructions)
- ☒ a. Greater than 1000kg/mo (2,200 lbs.)
- ☐ b. 100 to 1000 kg/mo (220 - 2,200 lbs.)
- ☐ c. Less than 100 kg/mo (220 lbs.)
2. Transporter (Indicate Mode in boxes 1-5 below)
- ☐ a. For own waste only
- ☐ b. For commercial purposes
- Mode of Transportation:
- ☐ 1. Air
- ☐ 2. Rail
- ☐ 3. Highway
- ☐ 4. Water
- ☐ 5. Other - specify
3. Treater, Storer, Disposer (at installation).
Note: A permit is required for this activity; see instructions.
4. Hazardous Waste Fuel
- ☐ a. Generator Marketing to Burner
- ☐ b. Other Marketers
- ☐ c. Burner - Indicate device(s):
- Type of Combustion Device:
- ☐ 1. Utility Boiler
- ☐ 2. Industrial Boiler
- ☐ 3. Industrial Furnace
- ☐ 5. Underground Injection Control

B. Used Oil Fuel Activities

1. Off-Specification Used Oil Fuel
- ☐ a. Generator Marketing to Burner
- ☐ b. Other Marketer
- ☐ c. Burner - Indicate device(s):
- Type of Combustion Device:
- ☐ 1. Utility Boiler
- ☐ 2. Industrial Boiler
- ☐ 3. Industrial Furnace
- ☐ 2. Specification Used Oil Fuel Marketer (or On-site Burner) Who First Claims the Oil Meets the Specification

IX. Description of Regulated Wastes (Use additional sheets if necessary.)

A. Characteristics of Nonlisted Hazardous Wastes. Mark 'X' in the boxes corresponding to the characteristics of nonlisted hazardous wastes your installation handles. (See 40 CFR Parts 261.20 - 261.24)

1. Ignitable (D001) ☐
2. Corrosive (D002) ☐
3. Reactive (D003) ☐
4. EP Toxic (D004) ☒
- (List specific EPA hazardous waste number(s) for the EP Toxic contaminant(s))
- L E A D

B. Listed Hazardous Wastes. (See 40 CFR 261.31 - 33. See instructions if you need to list more than 12 waste codes.)

1	2	3	4	5	6
7	8	9	10	11	12

C. Other Wastes. (State or other wastes requiring an I.D. number. See instructions.)

1	2	3	4	5	6

X. Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature <i>Robert K. May</i>	Name and Official Title (type or print) Exec. Director	Date Signed 9-25-91
-----------------------------------	---	------------------------

XI. Comments

Saw Wee Kee Park is site of former municipal dump. Number is being requested because of need to remove 35-45 exposed drums containing dried paint with TCLP of 6.44 PPM lead.

Note: Mail completed form to the appropriate EPA Regional or State Office. (See Section III of the booklet for addresses.)

C91-182N

USE-A #: IL 0000000000 | IEPA #: 0938070003
Facility Name: Saw-Wee-kee Nature Preserve | Phone #: 708-554-1010
Street Address: Sundawn Lane | County: Kendall
City: Oswego | State: IL | Zip: 60843
Region: II | Inspection Date: 2/22/91 | From: 11⁰⁰ Am To: 1⁰⁰ Am
Weather: 40° F Clear

Verified As: <u>Non - Notification</u>		Regulated As: <u>Non Regulated</u>	
LDF? <u>N</u> HPV? <u>N</u> <small>YES OR NO</small>	90-Day F/U Required?: YES _____ NO <u>✓</u>		

CEI: _____ Sampling: _____ Citizen Complaint: 1 Closed: _____ Other: _____
ME/O&M: _____ Record Review: _____ Follow-Up to Inspection of: _____ Withdrawal: _____

SQG: _____ Claimed Nonhandler: ✓ Other (Specify in Narrative): _____

Notification Date: ____/____/____, from (initial) or (subsequent) Notification.

Initial Part A Date: ____/____/____ Amended: ____/____/____

P A Withdrawal requested: ____/____/____ Approved by (US)(IL) EPA: ____/____/____

Part B Permit Submitted: Y or N ____/____/____ Final Permit Issued: ____/____/____

as the firm been referred to - USEPA: Y or N ____/____/____
 inois Attorney General: Y or N ____/____/____ County State's Attorney: Y or N ____/____/____

CACO: ____/____/____ CAFO: ____/____/____ Consent Decree: ____/____/____
Federal Court Order: ____/____/____ State Court Order: ____/____/____ IPCB Order: ____/____/____

[illegible]

C91-182N

RCRA INSPECTION REPORT

LL-PA #: 1L 0000000000

IEPA #: 0 9 3 8 0 7 0 0 0 3

Facility Name: Saw-Wee-kee Nature Preserve

Phone #: 708-554-1010

Street Address: Syndown Lane

County: Kendall

City: Oswego

State: IY

Zip: 60643

Region: T

Inspection Date: 2 / 22 / 91

From: 11⁰⁰ Am To: 1⁰⁰ Pm

Weather: 40° F Clear

TYPE OF FACILITY

Notified As: Non - Notification

Regulated As: Non Regulated

LDF? N HPV? N

90-Day F/U Required?:

NO

TYPE OF INSPECTION

CEI: _____ Sampling: _____ Calzen Complaint: _____ Closed: _____ Other: _____

CME/O&M: _____ Record Review: _____ Follow-Up to Inspection of: _____ Withdrawal: _____

NON-REGULATED STATUS

SQG: _____ Claimed Nonhandler: _____ Other (Specify in Narrative): _____

PART A NA

Notification Date: ____/____/____, from (initial) or (subsequent) Notification.

Initial Part A Date: / / Amended: / /

Part A Withdrawal requested: / /

Approved by (US)(IL) EPA: ____/____/____

PART B PERMIT APPLICATION NAPart B Permit Submitted: Y or N / / Final Permit Issued: / /

ENFORCEMENT N/A

Has the firm been referred to -

USEPA: Y or N / /

Illinois Attorney General: Y or N ____/____/____ County State's Attorney: Y or N ____/____/____

ORDERS ISSUED NA

CACO: / / CAFO: / / Consent Decree: / /

Federal Court Order: ___/___/___ State Court Order: ___/___/___ IPCB Order: ___/___/___

TSD FACILITY ACTIVITY SUMMARY[illegible]

SUMMARY OF APPARENT VIOLATIONS

OWNER

OPERATOR

Name		Name	
OSwego Park District		Same	
Address Plainfield & Grove Roads		Address	
City Oswego		City	
State IL	Zip 60843	State	Zip
Phone # 708-564-1010		Phone #	

PERSON(S) INTERVIEWED

TITLE

PHONE #

	TITLE	PHONE #
Neil Hambly	Complainant	708-553-7161
Mike Woodworth	" "	708-554-2833
Bob Pilmen	Attorney for Complainants	708-597-4254

INSPECTION PARTICIPANT(S)

AGENCY/TITLE

PHONE #

Mary Glyn	IGPA / EPS III	708-531-5900

PREPARED BY

AGENCY/TITLE**PHONE #**

10 _____

[illegible][illegible][illegible]

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
CHAIN OF CUSTODY

I certify that the samples listed below were collected in my presence and that each sample bottle was sealed intact by me and that I wrote my initials and the date on the seal of each bottle.

Site Inventory No. 0938070003

County Kendall

Federal I.D. No. NONE

Saw-wee-kee F.P. Dump
(Facility Name)

SAMPLING TEAM

[illegible]

Sealer's Signature Mary H. [Signature] Date 2/22/91 Time 2⁰⁰ AM/PM (M)

Sampler(s) Mary Hym _____

I certify I received the above samples, with each seal on each bottle intact and the sealer's initials written on each sample seal.

CARRIERS

[illegible]

LAB STODIAN

I certify I received the above samples with each seal on each bottle intact, and the sealer's initials written on each sample seal. After recording these samples in the official record book, these same samples will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature Harry J. Park Date 1-25-51 Time 3:05 A.M. P.M.
Lab Location Chicago (City)

0938070003/Kendall County
Saw-Wee-Kee Nature Preserve
February 22, 1991

Narrative

An inspection was conducted at this site in response to citizen complaint C91-182N which reported possible illegal landfill activities. The following parties accompanied me.

Robert Pilmer - Attorney for Complainants
Neil Hambly - Complainant
Mike Woodworth - Complainant

Neil Hambly claimed that this area was strip mined in the 1930's and that unclean fill has been used in several locations throughout the past 60 years. The property has been owned by the Oswego Park District since the 1960's.

The most recent unclean filling activity occurred in January 1991 in a piece of land that is approximately 4500 square feet and located approximately 1200 feet southwest of the nature preserve entrance and 150 feet east of the Fox River. Hambly claimed that KR & G Trucking Co. had brought in the material.

I observed the following types of debris in this area:

- Piles of scrap metal, railroad ties, tires and drums (labeled as hydraulic oil) located in the northwestern portion of the area.
- Piles of metal reinforced concrete located in the southeastern portion of the area.
- Piles of styrofoam and scrap metal (including the remains of an old truck) located in the center of the area.

Hambly pointed out an area directly south of the current dumping site (described above) that was filled with debris and covered in the fall of 1988. He also gave me photographs taken at the time of the dumping. The Agency's region files indicate that Todd Marvel (IEPA-DLPC) conducted investigations of this area on October 13, 1988 and November 4, 1988. Both inspection reports describe deposition of unclean fill. On December 9, 1988 a CIL was sent to the Oswego Park District. Lines 1 & 11 of the open dump checklist were cited. A written response to the CIL was submitted on January 11, 1989 but there is no evidence that a follow up inspection was ever conducted.

We then proceeded to an area north of the current fill area which appeared to be a wetland. Hambly claimed that this area had been filled in with unclean fill and subsequently covered in 1985.

Approximately 1/2 mile northeast of the alleged wetland, we observed 20 to 25 drums dumped along the side of a small hill. Some drums appeared to be full. A few had corroded and a multicolored solid paint like substance was observed inside the drums.

Additional Notes

Two samples were taken from an apparent leachate seep along the banks of the Fox River, located approximately 1/2 mile southwest of the current filling area. A slight oil sheen was observed on the surface of the seepage. Neil Hambly stated that this area was used for a city dump in the 1930's and 1940's but no dumping has occurred recently. The samples will be analyzed as follows:

X201 - Total lead, cadmium, chromium, iron, zinc and copper

X202 - Volatile and semivolatile organics.

The samples were transported to IEPA's Chicago Lab on February 25, 1991. Proper chain of custody procedures were followed.

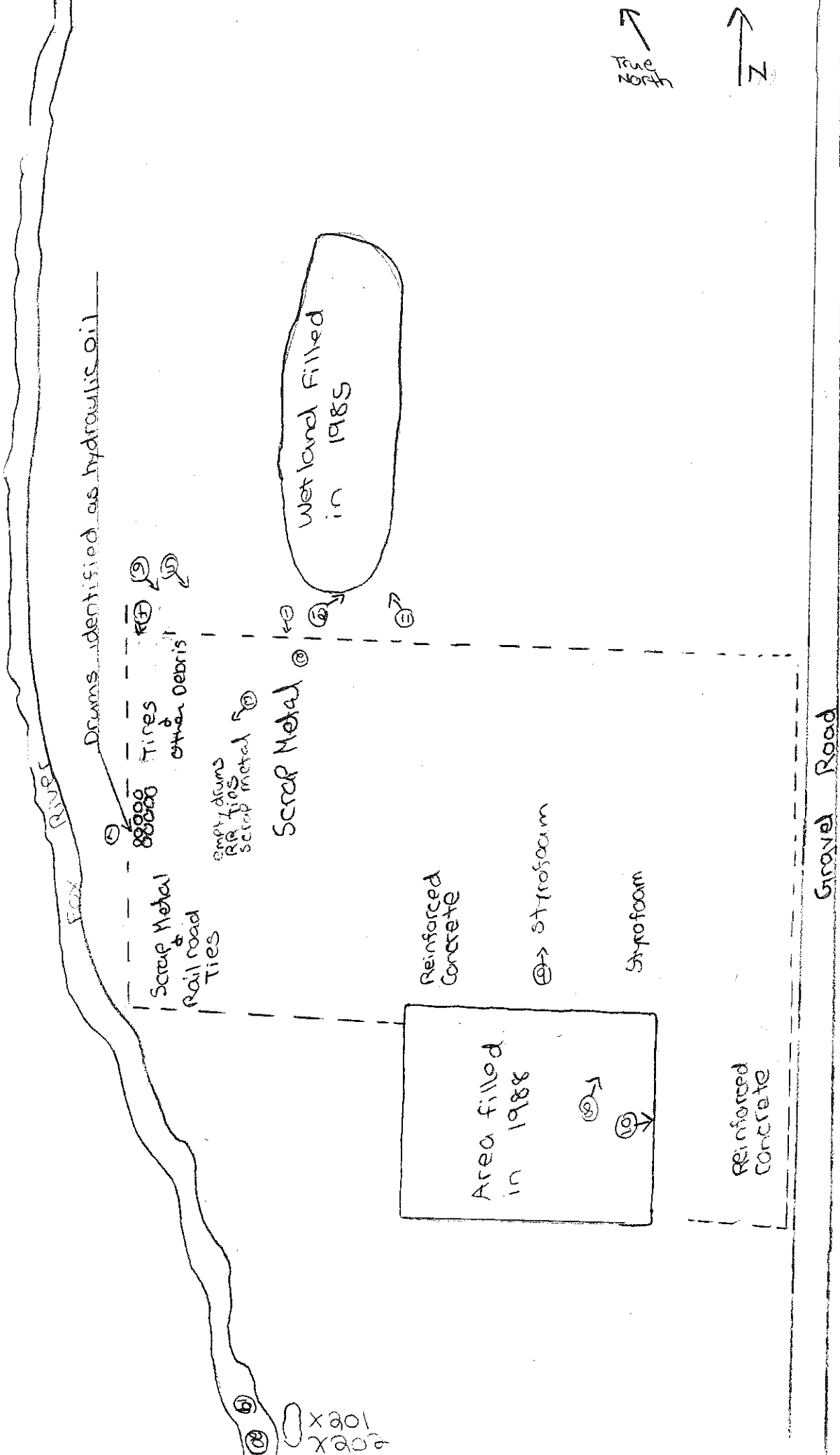
Apparent Violations

The following Open Dump Violations have been cited.

1. Line 1 (Section 21(q)(1) of the Act) - causing or allowing litter.
2. Line 4 (Section 21(q)(4) of the Act) - causing or allowing the deposition of waste in standing or flowing waters.
3. Line 11 (Section 807.201 and 807.202 of the Regulations) causing or allowing the development and/or operation of a solid waste management site without a permit issued by the Agency.
4. Line 12 (Section 21(a) of the Act) - conducting any waste-storage, waste-treatment or waste-disposal operation without a permit granted by the Agency.
5. Line 13 (Section 21(d) of the Act) - conducting any waste-storage, waste-treatment or waste-disposal operation without a permit granted by the Agency.

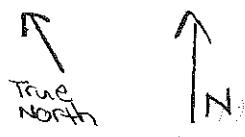
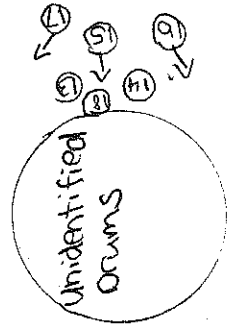
The following RCRA violation was cited:

6. 722.111 - No hazardous waste determination for the 20 to 25 drums observed on the northeast portion of the Nature Preserve property.



Approximate
Boundary of current filling area

0938070003 / Saw-Wee-Yee Nature Preserve
2/22/91
C91-182N
NOT TO SCALE
M.G.



INSPECTION REPORT

USEPA #: IL 0000000000	IEPA #: 0938070003
Facility Name: Saw-Wee-kee Nature Preserve	Phone #: 708-554-1010
Street Address: Sundawn Lane	County: Kendall
City: Oswego	State: IL Zip: 60543
Region: II	Inspection Date: 3 / 7 / 91 From: 10 ³⁰ Am To: 11 ³⁰ Am
Weather: 30°F Clear	

TYPE OF FACILITY

Notified As: <u>Non - Notifier</u>		Regulated As: <u>Non - Regulated</u>	
LDF? <u>N</u> HPV? <u>N</u> <small>(Yes or No)</small>	90-Day F/U Required?: YES _____ NO <u>✓</u>		

TYPE OF INSPECTION

RCRA: _____ Sampling: ☒ Citizen Complaint: _____ Closed: _____ Other: _____

Record Review: _____ Follow-Up to Inspection of: _____ Withdrawal: _____

NON-REGULATED STATUS

SQG: _____ Claimed Nonhandler: J Other (Specify in Narrative): _____

PART A NA

Notification Date: ____ / ____ / ____ , from (initial) or (subsequent) Notification.	
Initial Part A Date: ____ / ____ / ____	Amended: ____ / ____ / ____
Part A Withdrawal requested: ____ / ____ / ____	Approved by (US)(IL) EPA: ____ / ____ / ____

PART B PERMIT APPLICATION NA

Part B Permit called by (US)(IL) EPA on: ____/____/____	Permit Due: ____/____/____
Part B Permit Submitted: ____/____/____	Draft Permit Issued: ____/____/____

ENFORCEMENT NA

Has firm been referred to:				USEPA? _____	IAG? _____	County SA? _____
Date(s) of initial referral:		____/____/____	____/____/____	____/____/____	____/____/____	
USEPA CACO: ____/____/____		CAFO: ____/____/____		ALJ Decision: ____/____/____		
Referral to DOJ by USEPA: ____/____/____			Federal Court Order Issued: ____/____/____			
PCB Order Issued: ____/____/____			State Court Order Issued: ____/____/____			

TSD FACILITY ACTIVITY SUMMARY[illegible]

SUMMARY OF APPARENT VIOLATIONS

OWNER

OPERATOR

Name Oswego Park District	Name Same
Address Plainfield & Grove Roads	Address
City Oswego	City
State IL Zip 60543	State Zip
Phone # 708-554-1010	Phone #

PERSON(S) INTERVIEWED

TITLE

PHONE #

No one on site		

INSPECTION PARTICIPANT(S)

AGENCY/TITLE**PHONE #**

Mary Glynn	IGPA / EPS III	708-531-5900
Ellen Carney	IGPA / LSCT	" "

PREPARED BY

AGENCY/TITLE**PHONE #**

Mary Glynn	IEPA / EPS III	"	"
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[illegible][illegible][illegible]

NARRATIVE

The purpose of this inspection was to obtain samples from the contents of one or more of a pile of unidentified drums located in the northeast portion of the site. These drums were originally observed during a 2/22/91 investigation of citizen complaint C91-182N.

Sample X203 was taken from the contents of a drum located near the front of the pile. The drum itself appeared to be almost completely corroded away. The contents was a solid multicolored substance.

The sample consists of 4 separate 8 oz bottles and will be analyzed as follows:

- X203(a) - TCLP for cadmium, chromium & lead
- X203(b) - TCLP for cadmium, chromium & lead
- X203(c) - TCLP for benzene, MEK, trichloroethylene and
tetrachloroethelyene
- Organic scan - volatiles & semi-volatiles
- X203(d) - Same as X203(c)

The samples were transported to IEPA's Chicago lab on the same day. Proper chain of custody procedures were followed.

MG:bh:5735B

0001 X 002

RAILROAD

Drains identified as hydraulic oil

Scrap Metal
Railroad
Ties

88000

Tires
&
other debris

Scrap Metal
Scrap Metal

Scrap Metal

Wetland filled
in 1985

Area filled
in 1988

Reinforced
Concrete

Styrofoam

Styrofoam

Reinforced
Concrete

Gingard Road

Approximate
Boundary of current filling area

38070003 / Saw-Wee-Yee Native Reserve

NOT TO SCALE

Unidentified
Drums

55 ft
3 ft
→

→

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003

Date: 3/7/91 Time: 10³⁰ Am Photograph By: Mary Gilym MYL



↑E

Comments: unidentified drums

Roll #: 91-275 Photo #: 1



↑E

Comments: unidentified drums

Roll #: 91-275 Photo #: 2

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003

Date: 3/7/91 Time: 10³⁰ Am Photograph By: Mary Glyn M/L



Comments: close up of drums

Roll #: 91-275 Photo #: 3



Comments: close up of drums

Roll #: 91-275 Photo #: 4

Illinois Environmental Protection Agency Photographs

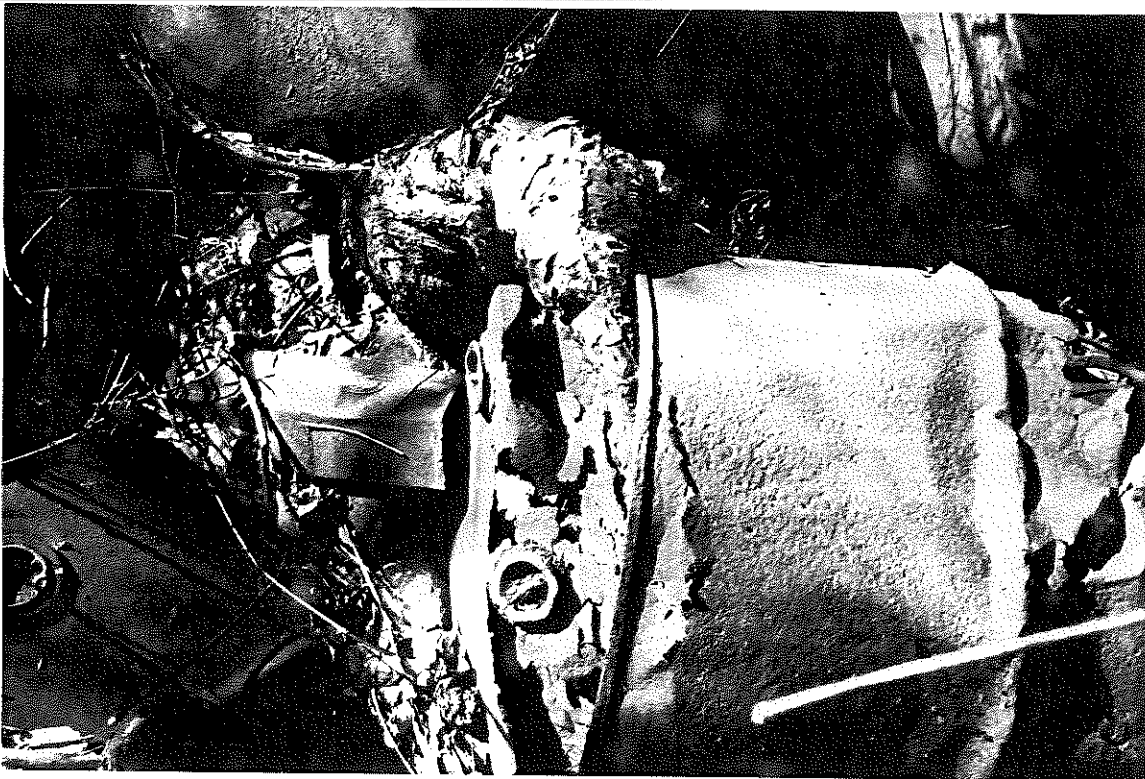
Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003

Date: 3/7/91 Time: 10³⁰ Am Photograph By: Mary Glyn M/L



Comments: close up of drums

Roll #: 91-275 Photo #: 5



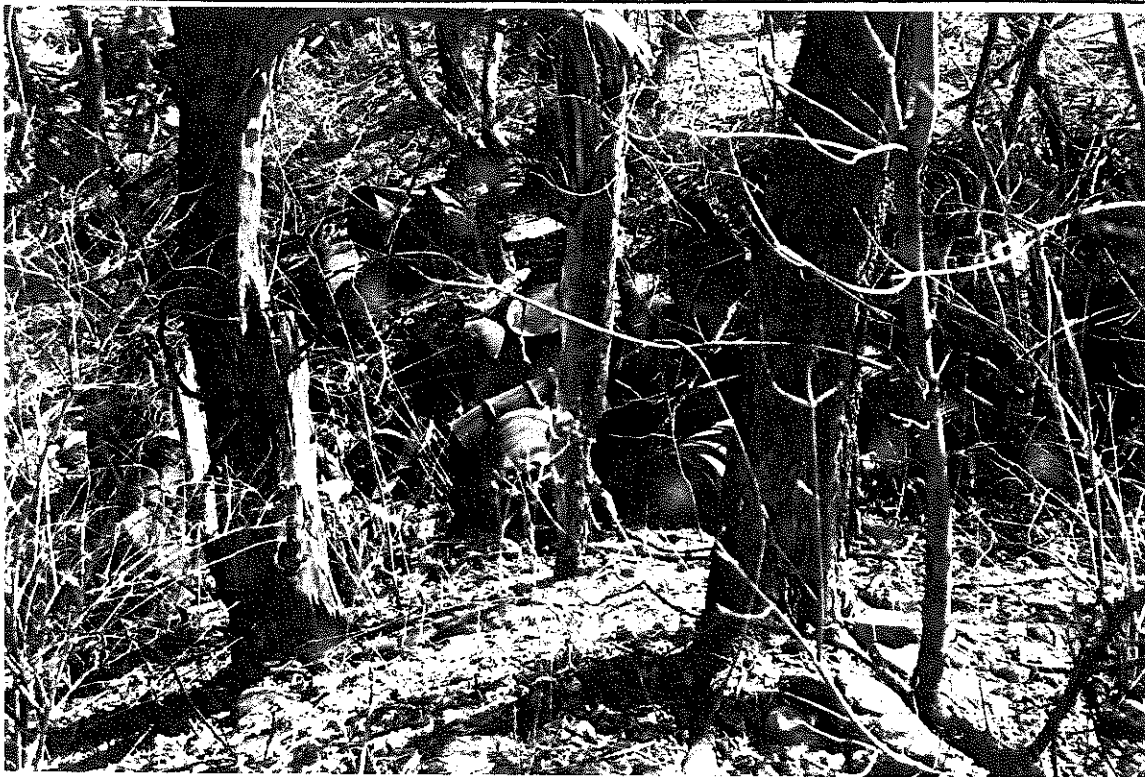
Comments: close up of drums

Roll #: 91-275 Photo #: 6

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003

Date: 3/7/91 Time: 10³⁰ Am Photograph By: Mary Gilman MJL



↑N

Comments: unidentified drums

Roll #: 91-278 Photo #: 7



↑SE

Comments: unidentified drums

Roll #: 91-278 Photo #: 8

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003

Date: 3/7/91 Time: 10³⁰ Am Photograph By: Mary Glynn MJL



Comments: close up of drum

Roll #: 91-278 Photo #: 9



Comments: close up of drum

Roll #: 91-278 Photo #: 10

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003

Date: 3/7/91 Time: 10³⁰ Am Photograph By: Mary Glyn MH



Comments: Drum contents that sample was taken from

Roll #: 91-275 Photo #: 11



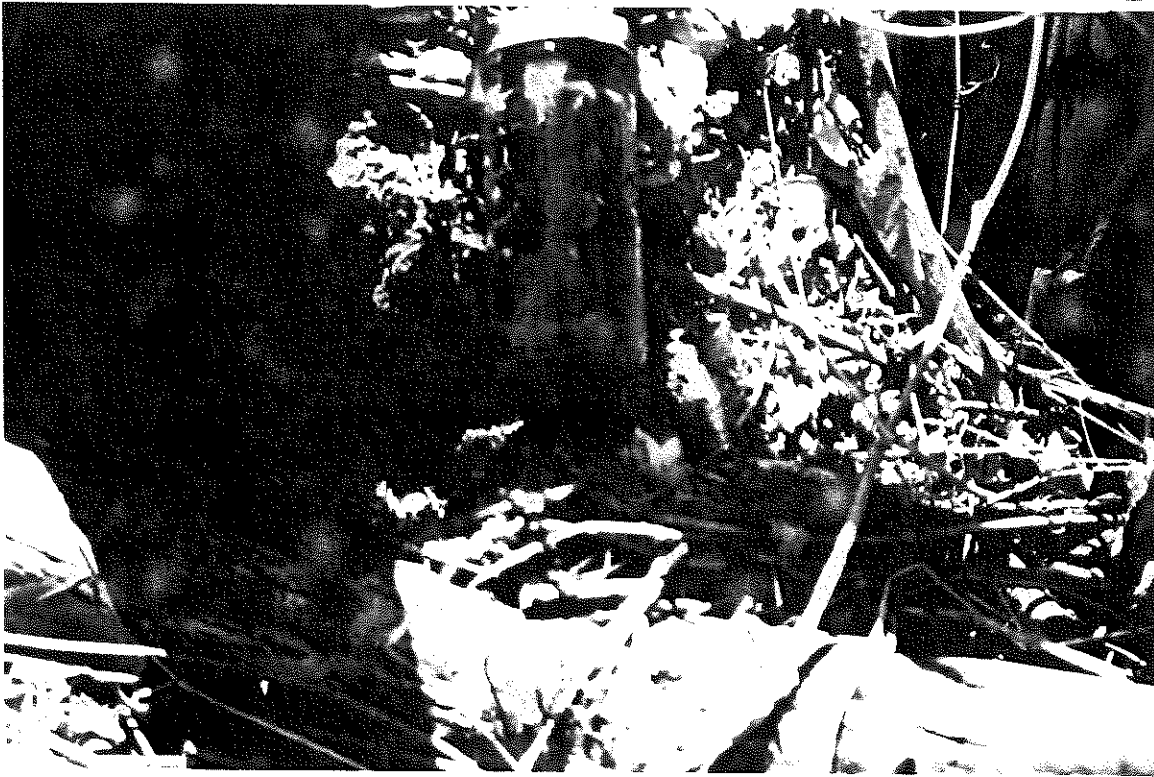
Comments: close up of material that sample was taken from.

Roll #: 91-275 Photo #: 12

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003

Date: 3/7/91 Time: 10³⁰ Am Photograph By: Mary Gilman MH



Comments: X203(a)

Roll #: 91-275 Photo #: 13



Comments: X203(d)

91-275 Photo #: 14

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Reserve Site #: 0938070003

Date: 3/7/91 Time: 10³⁰ Am Photograph By: Mary Gilman MH



Comments: X203(d)

Roll #: 91-275 Photo #: 15



Comments: X203(c)

Roll #: 91-275 Photo #: 11

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003
Date: 3/7/91 Time: 10³⁰ Am Photograph By: Mary Glyn MY



Comments: close up - sample X203(a)(b)(c)(d)
Roll #: 91-278 Photo #: 17

Comments: _____
Roll #: 91-278 Photo #: _____

Illinois Environmental Protection Agency Photographs

Site Name: Saw-wee-kee Nature Preserve Site #: 0938070003
Date: 2/22/91 Time: 11⁰⁰ Am - 1⁰⁰ pm Photograph By: Mary Glynne M.Y.



↑s

Comments: refuse in standing water

Roll #: 91-268 Photo #: 1



Comments: close up of # 1

Roll #: 91-268 Photo #: 2

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003
Date: 2/22/91 Time: 11⁰⁰ Am - 1⁰⁰ pm Photograph By: Mary Glynn M.Y.



↑sw

Comments: Empty Drums, Railroad Ties & scrap metal

Roll #: 91-268 Photo #: 3



↑s

Comments: Tires & other debris

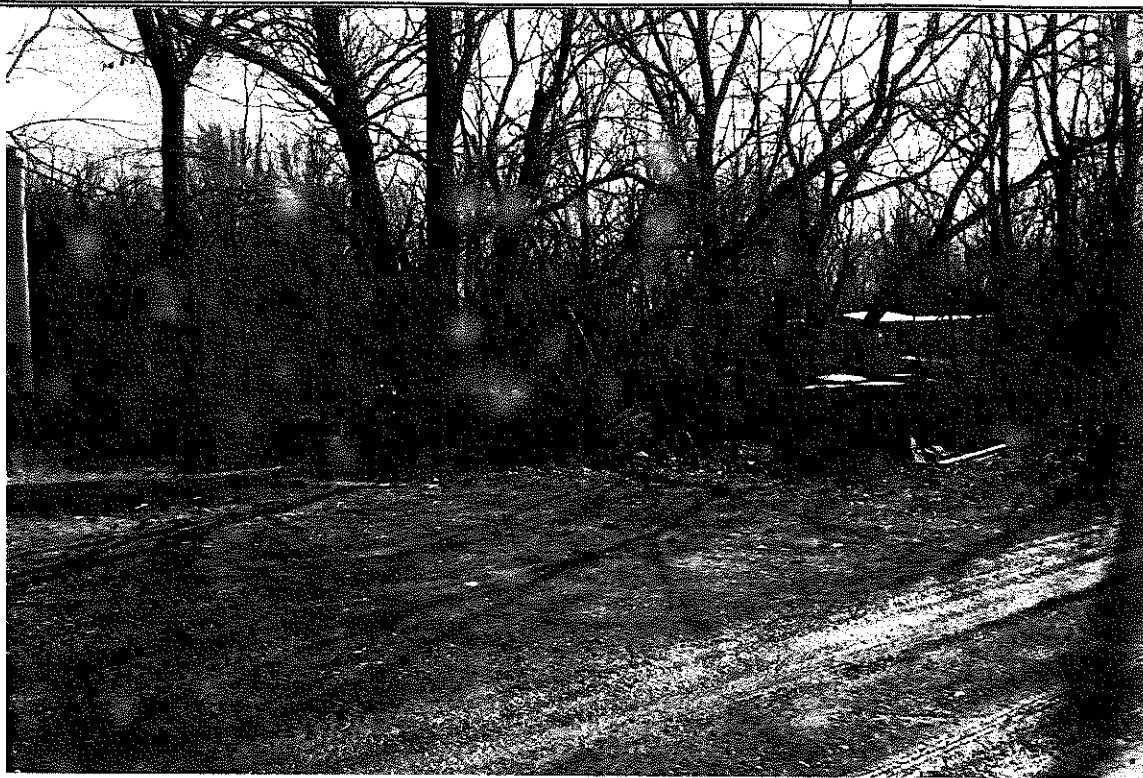
Roll #: 91-268

Photo #: 4

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003

Date: 2/22/91 Time: 11⁰⁰ AM - 1⁰⁰ PM Photograph By: Mary Glynn M/L



↑SE

Comments: Drums of Hydraulic Oil, scrap metal
& Railroad Ties

Roll #: 91-269 Photo #: 5



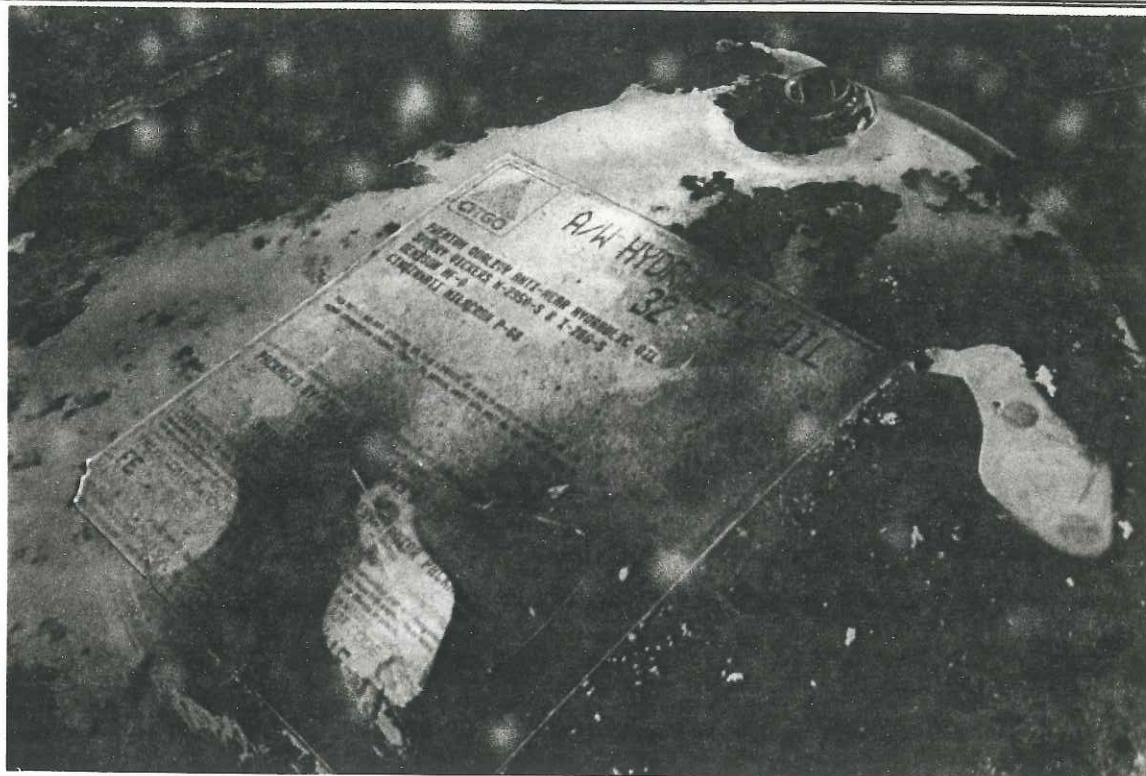
↑SE

Comments: Drums, wood & scrap metal

Roll #: 91-269 Photo #: 6

Illinois Environmental Protection Agency Photographs

Site Name: Saw-wee-kee Nature Preserve Site #: 0938070003
Date: 2/22/91 Time: 11⁰⁰ AM - 1⁰⁰ PM Photograph By: Mary Glynn MJ



Comments: close up of drum label
Roll #: 91-269 Photo #: 7



Comments: Piles of styrofoam, reinforced concrete
Roll #: 91-269 Photo #: 8

Illinois Environmental Protection Agency Photographs

Site Name: Saw-wee-kee Nature Preserve Site #: 0938070003

Date: 2/22/91 Time: 11⁰⁰ Am - 1⁰⁰ pm Photograph By: Mary Glynne M.H.



↑N

Comments: Pile of styrofoam

Roll #: 91-269 Photo #: 9



↑E

Comments: Pile with reinforced concrete

91-269

Illinois Environmental Protection Agency Photographs

Site Name: Saw-wee-kee Nature Preserve Site #: 0938070003
Date: 2/22/91 Time: 11⁰⁰ Am - 1⁰⁰ pm Photograph By: Mary Glynn MY



↑NW

* Photo Taken by Complainant

Comments: wetland being filled in

Roll #: 91 - * Photo #: 11



↑NE

Comments: wetland being filled in

Roll #: 91 - * Photo #: 12

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003
Date: 2/22/91 Time: 11⁰⁰ AM - 1⁰⁰ PM Photograph By: Mary Glynn M.Y.



Comments: close up of unidentified drums
Roll #: 91 - * Photo #: 13



Comments: close up of unidentified drums
Roll #: 91 - * Photo #: 14

Illinois Environmental Protection Agency Photographs

Site Name: Saw-wee-kee Nature Preserve Site #: 0938070003
Date: 2/22/91 Time: 11⁰⁰ Am - 1⁰⁰ pm Photograph By: Mary Glynn M.Y.



↑ S

Comments: Unidentified Drums

Roll #: 91 - * Photo #: 15



↑ SE

Comments: Unidentified Drums

Roll #: 91 - *

Photo #: 16

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003
Date: 2/22/91 Time: 11⁰⁰ Am - 1⁰⁰ pm Photograph By: Mary Glynn M.Y.



↑ SW

Comments: unidentified drums

Roll #: 91-X Photo #: 17



Comments: close up of material in some of the
drums

Roll #: 91-269 Photo #: 18

Illinois Environmental Protection Agency Photographs

Site Name: Saw-Wee-kee Nature Preserve Site #: 0938070003
Date: 2/22/91 Time: 11⁰⁰ AM - 1⁰⁰ PM Photograph By: Mary Glynn M.H.



Comments: Sample X201 - close up

Roll #: 91-268 Photo #: 19



Comments: Sample X202 - close up

Roll #: 91-268 Photo #: 20

Corrective Action

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: April 23, 1992

SUBJECT: Saw Wee Kee Geophysical
Investigation

FROM: J. Ursic, Geologist JRJ
Technical Support Section

TO: Louise Fabinski, ATSDR

On Friday April 17, 1992 I conducted a cursory geophysical survey at the Saw Wee Kee Nature Preserve in Oswego, Illinois. The survey was conducted at the request of Louise Fabinski, the Agency for Toxic Substances Disease Registry (ATSDR) representative for USEPA Region 5. The purpose of the site visit was to meet with local residents and locate, if possible, general areas where drums were allegedly buried.

The park is located adjacent to the southeast bank of the Fox River approximately 2.5 miles west-southwest from downtown Oswego. The park occupies approximately 160 acres with several residences located northwest of the Preserve, and in the central portion of the Preserve. The area was used for strip-mining sand and gravel until the late 1930s. It was later reportedly used as an open dump until recently.

I arrived on site at approximately 9:35AM and calibrated the geophysical instrument to be used during the survey (an EM-31), shortly thereafter I was met by the following people.

Louise Fabinski, ATSDR		
Frank Vaughan, Illinois Department of Public Health		
Tom Baughman, Illinois Department of Public Health		
Neil Hambly,	Local resident	
Ramona Capalby,	"	"
Wayne Capalby,	"	"
William Klages Jr.,	"	"

A meeting was held at a local residence to gather information and maps concerning past operations at the site. Following the meeting, a reconnaissance of the area began guided by the local citizens previously mentioned. Weather during the survey was mild (low to mid 50's) and overcast. Significant amounts of rain had occurred during the previous several days. The ground was wet and muddy.

The cursory geophysical survey was conducted with a Geonics EM-31 electromagnetic ground conductivity meter. A majority of the survey was conducted with the coils aligned in the vertical dipole

orientation (deepest detection mode), except when the coils were shifted to the horizontal dipole orientation (shallowest detection mode) to ascertain a relative depth to target.

Instrument response was measured using the in-phase or metal detection mode. Background readings were primarily in the upper 20 parts per thousand range, slightly higher than expected and probably due to wet ground conditions.

The cursory geophysical survey used no pre-determined grid location system to investigate the area. Local citizens helped reference areas of concern by using various landmarks found on-site. Instrument readings were not recorded at regular intervals for lack of an accurate identification system. However, areas having major off-scale in-phase readings were located and approximated on a map (see attachment).

The following is a record of the EM-31 traverses made on April 17 at the Saw Wee Kee site. Use the attached map for reference.

Area A is located at an embankment and service road near the Preserve entrance where witnesses stated that some drums were recently removed. No drums were visible from the surface in the immediate area. Data interpreted from in-phase EM-31 readings indicated a very conductive zone (typically indicative of buried metallic entity[ies]) near the toe of the embankment. In addition, very conductive areas were also found on and above the embankment.

Area B was noted as the "Boy Scout camping area". Metal debris and glass were scattered throughout the area. Several mounded gravel heaps were also noted in this area. Protruding from one mound was a 55 gallon drum which was partially covered with gravel. In-phase EM-31 readings on several of the mounds in this area were very conductive.

Area C is the most extensive tract where high in-phase conductivities were concentrated. Surface debris such as plastic scrap and glass were scattered throughout this area. Several locations in area 3 have metal scrap evident at the surface.

Area D is located adjacent to the river extending from the site entrance to several hundred feet past the boat launch area. In-phase EM-31 readings in this area were near background levels, with the exception of a few small isolated areas of high in-phase conductivity levels.

Area E is noted as an area having buried railroad ties. In-phase EM-31 readings were at or near background levels in this area.

Area F had in-phase conductivity levels at or near background.

Area G is an alleged leachate seep. Quadrature phase mode (gross ground conductivity) readings were taken at this location to ascertain if the liquid was significantly conductive or non-conductive. No indications were observed with the EM-31 to establish that the liquid was significantly conductive or non-conductive. In-phase readings were taken at this location and at the top of the ridge and were at or near background levels. The ridge which exists above the alleged seep is bordered by a pond on the opposite side. It is my opinion that the level of the pond surface is higher than the level of the seep and a possible connection between the pond and seep is likely.

Area H is noted as the "bus turn-around". The site surveyed included an additional area immediately southwest of the turn-around. Generally, EM-31 readings at both areas were at or near background levels. Exceptions were noted near the edge of the road (southwestern edge) and near a tree near the turn-around. EM-31 readings near the edge of the road indicated a conductive object that appeared to be linear. It is my opinion that this linear object is a buried pipe, cable, utilities, etc. After I disclosed my opinion to the group, mention was made by Mr. Klages that an old railroad water pipeline may exist in this area. Mr. Klages stated that the line may exist from an old pump-house location near the river to the railroad tracks to the south. The anomaly near the tree was fairly limited in size and extent.

Area I, noted on the map as "1+ Acre Park Landfill/Dump Site", was not investigated. The local citizens who accompanied me did not offer the opportunity to survey this area. Therefore no determination can be made concerning the presence or absence of buried metallic materials.

The geophysical survey was concluded at approximately 12:30 PM.

During my traverses through the Preserve several ponds were observed. The ponds are probably a result of past mining activities. Some of the ponds have metal debris in or protruding from the water surface.

It is my opinion that several areas in the Preserve contain various amounts of buried metallic objects. Specific burial areas noted are: areas A, B, C and D. Area C seems to have the most intensive and extensive (several hundred thousand square feet) EM-31 anomalies of the Preserve. The region near area A also has significant but less extensive anomalies. In my opinion, both of

these areas (C & A) are predominantly metallic materials. Area B, as I stated before, has metallic materials limited to the mounds in the immediate area. Anomalies found in area D were less frequent and more typical of general landfilling operations, where metallic objects are usually indiscriminately scattered throughout the fill.

The amount of overburden which lies on top of the metal materials is fairly shallow, in most circumstances I estimate depths of approximately 1 to 5 feet. Actual depth to the bottom of the metal materials cannot be determined without further geophysical investigation.

Identifying specific pieces of buried metallic materials cannot be determined easily with the geophysical methods used during this investigation. Therefore, to state that these buried masses are drums cannot be assumed without further evidence. I can only state that a mass of metallic materials (ferrous and/or non-ferrous metal[s]) exist below the ground surface. However, some inference and connection could be associated with anomalies and areas where witnesses stated that drums were previously removed. The same assumption could also apply in those areas where anomalies and drum(s) still exist protruding from the overburden.

I have also attached, in addition to the location map, technical information regarding the EM-31.

Thank you for the opportunity to participate in this ASTDR project. If you have any questions, I can be contacted at 3-1526.


2 attachments

cc: Steve Ostrodka w/o attachments

ILD 984 839 159

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 5

MEMORANDUM

DATE: March 9, 1992
FROM:  Chuck Orzechoskie, Chief
Wetlands Regulatory Unit (WQW-16J)
TO: George Schupp, Chief
Quality Assurance Section (SQ-14J)
SUBJECT: Oswegoland Park District Correspondence and Request for
Concurrence (QAS WD Log-In # 7)

Your return memorandum dated March 3, 1992, concerning the review of the proposed fill material sampling program for the Sau-Wee-Kee Forest Preserve, Oswegoland Park District, has been received and your suggestions regarding the testing program and QAPjP have been incorporated into my proposed correspondence to the Park District's agent, Environmental S/E. The suggestions you provided are helpful and will streamline the Region's handling of this ongoing enforcement matter.

At this time, I am requesting your concurrence with my proposed correspondence. Please initial and date the yellow copy contained in the enclosed file, and return the file to me for forwarding to ORC. We will contact you to arrange for a pre-QAPjP meeting following contact from the Park District and/or its agent.

Questions in this matter should be directed to Gerald D. Winn, Enforcement Officer, at 6/2777.

Provided concurrence 3-10-92
— J. Bolger for GCS

RECEIVED
MAR 10 1992
QUALITY ASSURANCE SECTION
ENVIRONMENTAL SCIENCES DIV.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

MAR 18 1992

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Thomas E. Slowinski
Environmental S/E
751 Roosevelt Road, Suite 7-110
Glen Ellyn, Illinois 60137

RE: Proposed Sampling Plan, Saw-Wee-Kee Park, Oswegoland Park District

Dear Mr. Slowinski:

The U.S. Environmental Protection Agency (U.S. EPA) has completed its preliminary review of the proposed sampling plan for the Saw-Wee-Kee Park, prepared by your firm for the Oswegoland Park District.

U.S. EPA finds the portions of the plan which address the materials content inventory to be acceptable, however, the portion of the plan relating to chemical analysis of the fill material is unacceptable. Sampling of the subject fill material may not commence until deficiencies in the sampling plan are addressed.

The Oswegoland Park District remains responsible for demonstrating that the fill material placed in waters of the United States at the site is acceptable, uncontaminated fill. To this end, the Park District must submit to U.S. EPA a revised proposed sampling plan which includes appropriate fill sampling following the Toxic Characteristic Leaching Procedure (TCLP). The revised plan should include a Quality Assurance Project Plan (QAPjP) and is subject to U.S. EPA final approval. The Park District or its designated agent is responsible for conducting the TCLP analysis, preparing its findings of the analysis, and submitting these findings along with analysis results to U.S. EPA. The final disposition of U.S. EPA's enforcement action pursuant to Section 309(a) of the Clean Water Act (33 U.S.C. § 1319(a)) will not be determined until the unauthorized fill material is adequately and demonstratively characterized as clean.

REPLY TO THE ATTENTION OF:

WQW-16J

RECEIVED
MAR 23 1992
QUALITY ASSURANCE SECTION
ENVIRONMENTAL SCIENCES DIV.

U.S. EPA suggests that a meeting be held between our representatives, you, the Park District, and any other applicable Park District contractors prior to your preparation of the QAPjP, in order to provide a better understanding of U.S. EPA requirements and to reduce the need for QAPjP revisions. Regional guidelines for QAPjP preparation are enclosed for your use, and may also be available on disc if you have access to WordPerfect 5.1 on personal computer.

The revised proposed sampling plan and QAPjP must be submitted to U.S. EPA within sixty (60) days of your receipt of this letter. Questions in this matter should be addressed to Gerald D. Winn, Enforcement Officer, at (312) 886-2777.

Sincerely yours,


Charles Orzechoskie, P.E.
Chief, Wetlands Regulatory Unit

cc: Edward V. Walsh, Attorney for Respondent
Bert Gray, Oswegoland Park District
Mark Retzlaff, Illinois Environmental Protection Agency,
Maywood (w/ encl.)
Bruce Yurdin, Illinois Environmental Protection Agency,
Springfield
Steve VanderHorn, Rock Island District, Corps of Engineers

bcc: George Schupp, SMQA-14J
Paul Dimock, HRE-8J
Ken Graves, CA-3T



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

MEMORANDUM

REPLY TO THE ATTENTION OF:

SQ-14J

DATE: MAR 03 1992

SUBJECT: Review of the Proposed Fill Material Sampling Program for the Sau-Wee-Kee Forest Preserve, Oswegoland Park District, Oswego, IL

FROM: George C. Schupp, Chief *Kevin B Bolger for GCS*
Quality Assurance Section

TO: Charles Orzechoskie, Chief
Wetlands Regulatory Unit

ATTENTION: Gerald Winn, Enforcement Officer

The Quality Assurance Section (QAS) has completed its review of the subject document (QAS WD Log-In # 7) received on March 2, 1992. The QAS concurs that the sampling plan prepared by Environmental S/E is unacceptable. Only a general approach is presented in the sampling plan with no details to evaluate.

A Quality Assurance Project Plan (QAPjP) should be prepared, reviewed and approved prior to any sampling and analysis activities. Although your letter suggests that a QAPjP be prepared for the TCLP analysis, a QAPjP should be inclusive of all field and lab activities, sampling procedures, QA objectives, data quality objectives, analytical procedures, custody procedures, etc. All of these elements contribute to the generation of technically and legally defensible data.

I suggest that a pre-QAPjP meeting be held prior to preparation of a QAPjP by the Oswegoland Park District and its contractors. The QAS has found that such meetings can limit the need for QAPjP revisions through a better of understanding of the regional QAPjP requirements. Participants should include the QAS, the Water Division enforcement officer and representatives of the Oswegoland Park District and its contractors.

USEPA Region 5 guidelines for the preparation of QAPjPs under the RCRA program are available and is generally applicable to the sampling & analysis. This guidance can be made available prior to the meeting.

Please contact Kevin Bolger of my staff at 3-7712 to set up the suggested meeting.

ENVIRONMENTAL S/E

Professional Engineers & Scientists

January 22, 1992

U.S. Environmental Protection Agency
77 West Jackson
5WQW-16J
Chicago, Illinois 60604

Attention: Mr. Gerald Winn

Subject: Saw Wee Kee Park, Oswegoland Park District

Dear Mr. Winn:

Enclosed are two (2) copies of the Proposed Sampling Plan for Saw Wee Kee Park. This is provided as a follow up to the December 13, 1991 letter from Ed Walsh of Sachnoff and Weaver, Ltd. This plan, submitted on behalf of the Oswegoland Park District, includes background information, a description of current site conditions, and the proposed plan for test trenches. We believe this plan will satisfy the concerns of the USEPA, and if implemented, will serve to resolve the issue of fill suitability.

Please feel free to contact us or Ed Walsh if you have any questions or comments.

Respectfully,



Thomas E. Slowinski
Vice President

cc: Edward V. Walsh, Sachnoff & Weaver, Ltd., w/encl
Robert Gray, Oswegoland Park District, w/encl

ese\263001.j22

**PROPOSED SAMPLING PLAN
SAW WEE KEE PARK
OSWEGO, ILLINOIS**

Prepared for:

Oswegoland Park District
313 East Washington
Oswego, Illinois 60543

By:

ENVIRONMENTAL S/E

751 Roosevelt Rd., Suite 7-110
Glen Ellyn, Illinois 60137

(708) 790-4010 FAX 790-4083

Introduction

Since approximately 1987, the Oswegoland Park District (OPD) has allowed one local contractor to place clean construction debris in a former gravel pit scar located within the boundaries of the Saw Wee Kee Park. Exhibit I, a 1"=100' 1986 spring aerial photograph, shows the area of the OPD property prior to any filling.

As shown on Exhibit I, the area that has been filled is a depressional former gravel pit scar that may be occasionally ponded by surface runoff. The majority of the area in question does not appear to be as ponded as other depressional scars to the west and northeast. Frequently ponded areas such as these may be considered "waters of the United States" pursuant to the Clean Water Act. If determined to be jurisdictional waters, a permit from the U. S. Army Corps of Engineers may be required for the placement or discharge of fill material into these areas. Filling of less than once acre of jurisdictional waters will qualify for a Corps of Engineers Nationwide Permit since these areas are isolated from the Fox River. Section 401 water quality certification from the Illinois EPA may also be required.

The purpose of placing the fill material in this depression was to create a larger parking area for additional horse trailers, since the park receives extensive use by equestrians. Parking for larger horse trailers is limited due to the diverse topography in the area. The area that has been filled on park property is shown on Exhibit II. Based on a field inspection of the site and an analysis of the aerial photograph, approximately 0.2 acres of potentially jurisdictional waters has been filled.

Current Conditions

On 12/10/91 Environmental S/E, Inc. (ES/EI) conducted a site inspection of a portion of Saw Wee Kee Park along the Fox River. We were accompanied by Robert Gray of the OPD. The area examined was a partially filled gravel pit scar that had become ponded. This strip mined area, now part of a park, was replete with spoil piles and ridges interspersed by long linear ponds. The landscape was typical of abandoned strip mine areas.

The vegetation on the spoil banks along the open water portion of the area investigated was dominated by American Elm (*Ulmus americana*), Green Ash (*Fraxinus pennsylvanica subintegerrima*), and Common Buckthorn (*Rhamnus cathartica*). Other species noted in this even-aged wooded area are given in the list below, and are accompanied by their quality rating information (Swink and Wilhelm 1979) and their National Wetland Categories (Reed 1988). Species rendered in all capitals are not considered native to the Chicago region.

- 14 Native Taxa
- 15 Total Taxa
- 2.79 Native Mean Rated Quality
- 2.40 Open Lands Mean Rated Quality
- 10.42 Natural Areas Rating Index
- 9.30 Open Lands Rating Index

RATING	SCIENTIFIC NAME	WETLAND CATEGORY
2	<i>Boehmeria cylindrica</i>	OBL
3	<i>Celtis occidentalis</i>	FAC-
1	<i>Cornus racemosa</i>	FACW-
6	<i>Cornus stolonifera</i>	FACW
2	<i>Fraxinus pennsylvanica subintegerrima</i>	FACW
	LONICERA SP	
0	<i>Phalaris arundinacea</i>	FACW+
2	<i>Populus deltoides</i>	FAC+
1	<i>Prunus serotina</i>	FACU
-3	RHAMNUS CATHARTICA	FACU
1	<i>Rhus radicans</i>	UPL
5	<i>Ribes missouriense</i>	UPL
4	<i>Salix nigra</i>	OBL
5	<i>Scutellaria lateriflora</i>	OBL
3	<i>Ulmus americana</i>	FACW-
4	<i>Vitis riparia</i>	FACW-

Most species observed are typical of disturbed wet woods.

Part of the linear gravel pit scar had been filled and was the subject of this investigation. The vegetation growing on the fill was an old field community typical of disturbed ground. It included the species in the following inventory.

4 Native Taxa
10 Total Taxa
1.00 Native Mean Rated Quality
0.30 Open Lands Mean Rated Quality
2.00 Natural Areas Rating Index
0.95 Open Lands Rating Index

RATING	SCIENTIFIC NAME	WETLAND CATEGORY
0	<i>Ambrosia artemisiifolia elatior</i>	FACU
-3	CIRSIIUM VULGARE	FACU-
1	DAUCUS CAROTA	UPL
0	<i>Echinochloa crusgalli</i>	FACW
3	<i>Eragrostis spectabilis</i>	UPL
1	<i>Panicum capillare</i>	FAC
1	PHLEUM PRATENSE	FACU
0	POLYGONUM AVICULARE	FAC-
-1	SETARIA FABERII	FACU+
1	VERBASCUM THAPSUS	UPL

This area was, of course, surrounded by ridges comprised of mine spoil. The vegetation on the ridges was a woods similar to that described above, along the water. The interface between the newer fill and the old spoil was vegetated by a weedy community composed of the species listed below.

6 Native Taxa
18 Total Taxa
2.50 Native Mean Rated Quality

0.17 Open Lands Mean Rated Quality
 6.12 Natural Areas Rating Index
 0.71 Open Lands Rating Index

RATING	SCIENTIFIC NAME	WETLAND CATEGORY
-1	ABUTILON THEOPHRASTI	FACU-
-2	AGROPYRON REPENS	FACU
-3	ARCTIUM MINUS	UPL
1	Aster pilosus	FACU+
0	BROMUS JAPONICUS	FACU
-2	CARDUUS NUTANS	UPL
6	Cornus stolonifera	FACW
1	DACTYLIS GLOMERATA	FACU
1	DAUCUS CAROTA	UPL
4	Eupatorium rugosum	FACU
-1	LEONURUS CARDIACA	UPL
-3	MELILOTUS ALBA	FACU
1	Oenothera biennis	FACU
0	POA COMPRESSA	FACU+
2	Rubus occidentalis	UPL
-1	RUMEX CRISPUS	FAC+
-1	SETARIA FABERII	FACU+
1	Solidago altissima	FACU

Overall, these areas were all of low floristic quality and no significant vegetational features were observed.

The ridges of mine spoil seen throughout this site were observed to have slopes ranging from 25 to 70 percent, and appeared to consist of loamy soil materials with a high percentage of gravel (1 to 3 inches in diameter) and coarse fragments (greater than 3 inches in diameter). The coarse, gravelly nature of the soils in this area prevented sampling to depth greater than 8 to 10 inches either with a shovel or a 3 inch diameter bucket auger. Given the inherent difficulties of obtaining samples, the nature of these disturbed soils was inferred from examining the existing surface at many places on the steep sideslopes. In all places inspected, the soil was seen to consist of approximately 50 to 80 percent gravel and coarse fragments with interstitial material of loam, sandy loam, or clay loam textures.

Given the steep slopes and very gravelly character of the soils in this area, it is unlikely these areas would exhibit the saturated conditions characteristic of a hydric soil given the very high rate of surface run-off and the rapid estimated permeability of the materials.

The ponded areas of the former gravel pit may be considered "waters of the United States" pursuant to the Clean Water Act. Due to the nature of the soils and the variability of water levels, the frequently ponded areas are not vegetated, and therefore, do not qualify as wetland.

Proposed Sampling Plan

Residents near the park have made unsupported allegations that unacceptable materials may be present in the fill material. In apparent response to these unsubstantiated allegations, the U.S.

Environmental Protection Agency (USEPA) has required that trenches be excavated through the fill material in order to visually examine the nature of the material.

The OPD is proposing the excavation of two backhoe trenches through the fill material as shown on Exhibit II. The presence of large chunks of concrete rubble in the fill may obstruct the completion of two continuous trenches, therefore, the exact locations of the trenches may be adjusted during the sampling operation.

The trenches will be excavated by a large backhoe, which can excavate to a depth of between 12 and 15 feet. USEPA has informed the OPD that trenching operations should be conducted in the presence of a representative from the USEPA.

Proposed Resolution of USEPA Enforcement Action

If no visual evidence of unacceptable materials are found during the proposed trenching activity, USEPA will take no additional action with respect to the alleged unpermitted fill, and will allow the OPD to apply for an after-the-fact Section 404 Permit from the U.S. Army Corps of Engineers, Rock Island District.

If USEPA considers unacceptable materials to be present, OPD understands that USEPA personnel may choose to collect samples for laboratory analysis. Any sampling activity by USEPA shall be conducted on the day of the trenching activity so that the trenches may be closed the same day for reasons of safety and to preclude contamination of the trenches by outside sources. Any samples of fill material taken by USEPA for purposes of content analysis shall be split with OPD. USEPA agrees to inform OPD of what analytical methods it intends to use and what parameters and constituents it intends to test for.

In the event that sample analysis results pursuant to Toxic Characteristic Leaching Procedure (TCLP) analysis show the material to be non-hazardous, and if visual observation or other data compares with those water quality standards relevant for 401 certification by the State of Illinois, USEPA will require no further assessment of the fill material and will abandon any enforcement action with respect to the fill material and allow OPD to apply for an after-the-fact Section 404 Permit from the U.S. Army Corps of Engineers, Rock Island District.

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 5

MEMORANDUM

DATE: February 28, 1992
FROM: Charles Orzechoskie, Chief
Wetlands Regulatory Unit (WQW-16J)
TO: George Schupp, Chief
MQA-Quality Assurance Section
Environmental Sciences Division (SMQA-14J)
SUBJECT: Proposed Fill Material Sampling Program for the
Sau-Wee-Kee Forest Preserve, Oswegoland Park District,
Oswego, Illinois

In August, 1991, the Wetlands and Watersheds Section issued an Administrative Compliance Order to the Oswegoland Park District pursuant to Section 309(a) of the Clean Water Act, ordering the Park District to remove fill material placed into a water-filled gravel pit located immediately adjacent to the Fox River. Previous contacts from RCRA, the Illinois Environmental Protection Agency, and neighbors to the Park District property indicated that contamination from paint by-products, hydraulic oil, and resins were present at various locations within the property. This indicates that chemical contaminants could possibly be present within the fill area identified by our Administrative Compliance Order.

In order to address this possible contamination problem prior to the removal of any fill material, the Park District was required to submit a sampling program for U.S. EPA review. The sampling plan required is intended to characterize the content of the fill material and should also identify the presence or absence of hazardous materials requiring special handling or special disposal. The Park District has provided a Proposed Sampling Plan, a copy of which is attached for your information. I intend to direct the Park District to provide U.S. EPA with TCLP analysis of the fill material, along with a QAPP for the program. My proposed correspondence to that effect accompanies this memorandum, and I request your concurrence.

Your expertise with the subject matter will be extremely helpful to our program's review of the sampling plan. Please provide me with your return comments concerning the proposed sampling plan and any further revisions to the plan which you might deem necessary. Additional comments from your standpoint would also be welcome.

If you have any questions in this matter, please contact Gerald Winn, Enforcement Officer, at 6-2777.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

WQW-16J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Thomas E. Slowinski
Environmental S/E
751 Roosevelt Road, Suite 7-110
Glen Ellyn, Illinois 60137

RE: Proposed Sampling Plan, Saw-Wee-Kee Park, Oswegoland Park
District

Dear Mr. Slowinski:

The U.S. Environmental Protection Agency (U.S. EPA) has completed its preliminary review of the proposed sampling plan for the Saw-Wee-Kee Park, prepared by your firm for the Oswegoland Park District.

U.S. EPA finds the portions of the plan which address the materials content inventory to be acceptable, however, the portion of the plan relating to chemical analysis of the fill material is unacceptable. Sampling of the subject fill material may not commence until deficiencies in the sampling plan are addressed.

The Oswegoland Park District remains responsible for demonstrating that the fill material placed in waters of the United States at the site is acceptable, uncontaminated fill. To this end, the Park District must submit to U.S. EPA a revised proposed sampling plan which includes appropriate fill sampling following the Toxic Characteristic Leaching Procedure (TCLP). The revised plan should include a Quality Assurance Project Plan (QAPP) for TCLP analysis and is subject to U.S. EPA final approval. The Park District or its designated agent is responsible for conducting the TCLP analysis, preparing its findings of the analysis, and submitting these findings along with analysis results to U.S. EPA. The final disposition of U.S. EPA's enforcement action pursuant to Section 309(a) of the Clean Water Act (33 U.S.C. § 1319(a)) will not be determined until the unauthorized fill material is adequately and demonstratively characterized as clean.

The revised proposed sampling plan and QAPP must be submitted to U.S. EPA within thirty (30) days of your receipt of this letter. Questions in this matter should be addressed to Gerald D. Winn, Enforcement Officer, at (312) 886-2777.

Sincerely yours,


Charles Orzechoskie, P.E.
Chief, Wetlands Regulatory Unit

cc: Edward V. Walsh, Attorney for Respondent
Bert Gray, Oswegoland Park District
Mark Retzlaff, Illinois Environmental Protection Agency,
Maywood (w/ encl.)
Bruce Yurdin, Illinois Environmental Protection Agency,
Springfield
Steve VanderHorn, Rock Island District, Corps of Engineers

ILD 984 839 159

LETTER REPORT
FOR
SAW WEE KEE NATURE PRESERVE
OSWEGO, ILLINOIS 60543
TDD: T05-9104-027
PAN: EIL0731SAA

JUNE 27, 1991

Prepared by: Thomas Adams for J. Northing Date: 6/27/91
Reviewed by: Thomas Adams for L. Andrews Date: 6/27/91
Approved by: John Adams Date: 6/28/91



ecology and environment, inc.

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International Specialists in the Environment

Mr. Duane Heaton, Deputy Project Officer
U.S. Environmental Protection Agency
Emergency Response Section
12th Floor
230 South Dearborn Street
Chicago, Illinois 60604

Re: Saw Wee Kee Nature Preserve
Oswego, Illinois 60543
TDD: T05-9104-027
PAN: EIL0731SAA

Dear Mr. Heaton:

On April 23, 1991, Ecology and Environment, Inc., Technical Assistance Team (TAT) was tasked by the United States Environmental Protection Agency (U.S. EPA) under Technical Directive Document (TDD) T05-9104-027 to assist local officials in determining whether groundwater has been affected by dumping activities at the Saw Wee Kee Nature Preserve (SWKNP), Oswego, Illinois (see Figure 1 for Site Location Map).

The SWKNP is a 160-acre, former strip-mined gravel pit, owned by the Oswego Park District (OPD). In the early 1960s, the OPD operated a open dump, filling parts of the strip-mined areas. It is not known when or if the dump was closed, but dumping was still occurring in February 1991. People living in the area have complained to the Illinois Environmental Protection Agency (IEPA) of various illness resulting from drinking the groundwater. The residents allege that their groundwater has been contaminated by dumping activities occurring at the SWKNP.

Prior to February 28, 1963, the SWKNP property was owned by the State of Illinois, Department of Conservation (DOC). The land had been acquired through a land swap and was used until the late 1930s for strip mining of gravel. Governor Otto Kerner signed House Bill 379 into law on June 13, 1963, giving the title for 160 acres comprising the SWKNP to the ODP for development into a recreational area.

By December 12, 1963, an open dump was opened on the SWKNP property (Oswego Ledger, 1963). The open dump was in operation until at least February 1991. The SWKNP is currently used as a nature preserve with horseback riding trails.

On December 11, 1982, the OPD conducted a sampling inspection in an area of the dump where barrels had been found. Many of the barrels were empty; however, some of the barrels contained paint sludge or dried residues of an industrial painting process. In addition, other materials were found, including hardened plastics. The labels on the containers indicated a nylon- and polycarbonate-based material. The hardened plastic material was traced to a Plano Molding Company, Plano, Illinois. The plastic material is a General Electric molding resin called "Lexan," a non-hazardous material.

On December 9, 1983, IEPA requested that OPD and the Armour-Dail Company of Montgomery, Illinois, remove all 55-gallon drums from the OPD property. During the summer of 1984, Armour-Dail Company removed 87 55-gallon drums containing waste material from their manufacturing operations. Approximately 50 drums that were not the property of Armour-Dail were left on-site. It is not known whether these drums were removed.

IEPA conducted a site inspection of the SWKNP on October 10, 1988, in response to a citizen complaint (C89-087N), concerning an alleged open dump containing hazardous materials. The inspection was conducted by Todd Marvel of IEPA. During the inspection, Marvel noted several areas of uncovered refuse. In the northwest area of dumping, several drums, oil filters, paint cans, paint thinner cans, batteries, and two containers of freon were observed. Marvel contacted Park District Superintendent Bert Grey, who stated that permission had been given to Dean and Lois Smith, owners of nearby property, to deposit clean fill in the dump area to provide a place for chicken and goat grazing. Both Grey and Smith denied any knowledge of any potentially hazardous waste materials in the dump area.

In November of 1988, Smith was able to contact the company responsible for the dumping, Hawk Earthmoving, Inc. On December 12, 1988, Hawk Earthmoving, Inc., removed the material in question and disposed of the material at the Waste Management, Inc., landfill in Plainfield, Illinois. The material was debris from a fire in a building owned by Hawk Earthmoving, Inc.

On February 22, 1991, an inspection of part of the SWKNP was conducted by Mary Glynn of IEPA, in response to a citizen complaint (C91-182N) which reported possible illegal landfill activities. Glynn was accompanied by Robert Pilmer, Attorney for the complainants, Niel Hambly and Mike Woodworth. Hambly stated that the recent dumping occurred in January, 1991, in a parcel of land approximately 4,500 square feet in area, located approximately 1,200 feet southwest of the SWKNP entrance and 150 feet from the Fox River. Hambly claimed that KR & G Trucking had brought in the material.

Glynn observed piles of scrap metal, railroad ties, tires, and drums (labeled hydraulic oil) located in the northwestern portion of this area. Other piles included reinforced concrete in the southeast portion and styrofoam and scrap metal in the central portion of the area. The dumping area appeared to be a wetland. Hambly also pointed out the 1988 dumping area which had been investigated previously by Marvel of IEPA. This area contained 20 to 25 drums dumped along the side of a small hill, approximately 1/2 mile northwest of the recent dumping area. Some of the drums appeared to be full. A few drums had corroded and contained a multicolored, solid, paint-like substance.

IEPA collected two leachate samples from a leachate seep located along the Fox River, approximately 1/2 mile southwest of the current dumping area. The sample results regarding the leachate were not available at the time of this report. A slight oil sheen was observed on the surface of the seepage. The results of the IEPA investigation are not known.

In a letter dated April 5, 1991, Robert Grey, Executive Director of the OPD, revoked Smith's dumping privilege and ordered him to remove all materials not defined as clean fill. Smith was given until April 21, 1991, to comply. At the time of this report it is not known whether the unacceptable material has been removed.

TAT conducted a residential well and surface water sampling inspection in the area of the SWKNP on May 5, 1991. John Nordine, TAT Team Leader, and Jane Malkin, TAT Site Safety Officer, met with Verneta Simon, U.S. EPA On-Scene Coordinator (OSC), and Frank A. Vaughan of the Illinois State Department of Public Health, at 1410 hours. TAT collected eight residential well samples and one surface water sample. A blank, matrix spike duplicate, and a duplicate sample were also collected with each sample matrix. See Table 1 for a list of residential well addresses and Figure 2 for Residential Well Location Map. See Appendix A for Site Photograph Log. OSC Simon and Vaughan interviewed the residents concerning any health problems they have had since living in the area of the site.

Niel Hambly, a local resident, showed OSC Simon and TAT a leachate seep located near the Fox River in the SWKNP. TAT collected a surface water sample from the leachate seep. See Figure 3 for Surface Water Sample Location Map.

Eight residential well samples, designated RW1 through RW8, and three surface water samples, designated SW1 through SW3, were analyzed for volatile organics (EPA method 8240) and semi-volatile organics (EPA method 8270) by Ecology & Environment, Inc., Buffalo, New York. Four residential well samples (RW1, RW2, RW9, and RW10) and the three surface water samples were analyzed for PCB/Pesticide (EPA method 8080) by Ecology & Environment, Inc., Buffalo, New York. Four residential water well samples (RW1, RW2, RW9, and RW10) were analyzed for total metals by ICP and AA, and cyanides by

Table 1
Residential Well Addresses

<u>Sample Number</u>	<u>Address</u>	<u>Well Depth</u>
RW1 & RW9	Hide-A-way Lakes (camp grounds) Rt. 71 & W. Van Emmon Rd. Yorkville, Il 60560	unknown
RW2	7707 Sundown Lane Yorkville, Il 60560	100 feet
RW3	7610 Sundown Lane Yorkville, Il 60560	550 feet
RW4	7663 Sundown Lane Yorkville, Il 60560	380 feet
RW5	7715 Sundown Lane Yorkville, Il 60560	unknown
RW6	7723 Sundown Lane Yorkville, Il 60560	85 feet
RW7	7050 Sundown Lane Yorkville, Il 60560	100 feet
RW8	6954 Sundown Lane Yorkville, Il 60560	310 feet

spectrophotometric method by Ecology & Environment, Inc., Buffalo, New York. The three surface water samples were analyzed for oil and grease (gravimetric method) by Ecology & Environment, Inc., Buffalo, New York. All results had a verbal two-week turnaround time requested under TDD T05-9104-027

Residential wells RW7 and RW8 were used as background samples. Residential well RW9 was a duplicate sample of RW1. Residential well sample RW10 was a blank sample of distilled water. Surface water sample SW2 was a duplicate sample of SW1. Surface water sample SW3 was a blank of distilled water. The analytical results of the residential well samples and surface water samples did not indicate any levels above detection limits or background. See Appendix B for Data Quality Assurance Review Packages.

Residential wells and surface water samples collected by TAT did not indicate a threat to human health or to the environment. The drums labeled hydraulic oil, the other unidentified drums, and the leachate seep flowing into the Fox River on the SWKNP site are a possible threat to the environment.

Should you have any questions, please feel free to contact this office.

Sincerely,

 John Nordine

John Nordine, TAT Member



Louis Adams, TAT Leader

cc: OSC Simon

Appendix A
Site Photo Log

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: SAW WEE KEE NATURE PRESERVE OSWEGO, IL

PAGE 1 OF 6

U.S. EPA ID:

TDD: T05-9104-027

PAN: EIL0739SAA

DATE: 5/9/91

TIME: 1455

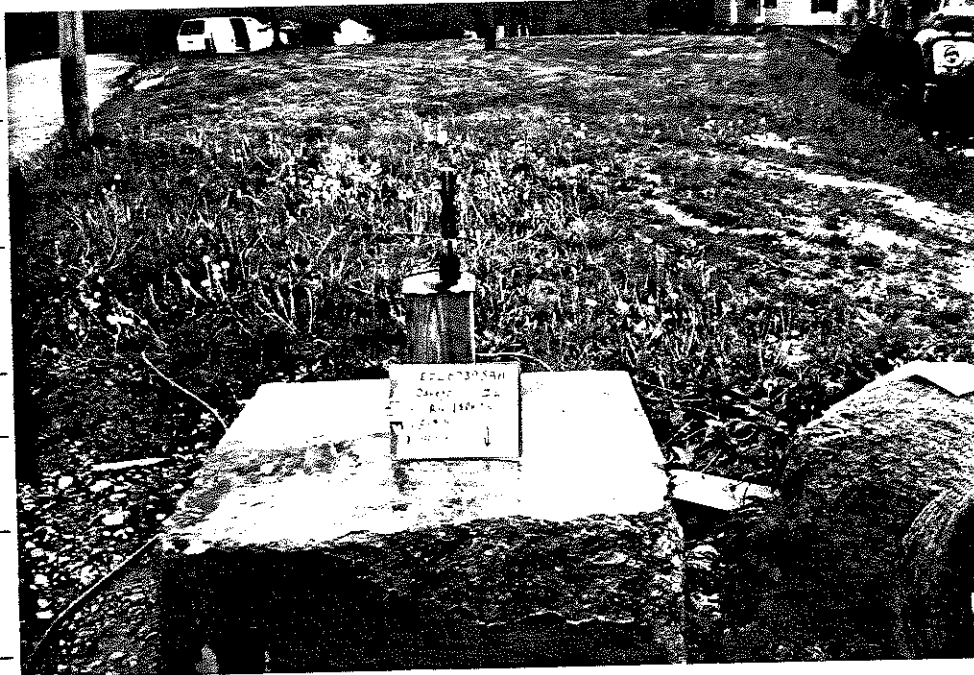
DIRECTION OF
PHOTOGRAPH:
SOUTH

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
RW1 AND RW9



DESCRIPTION: RW1 AND RW9 SAMPLE LOCATIONS

DATE: 5/9/91

TIME: 1755

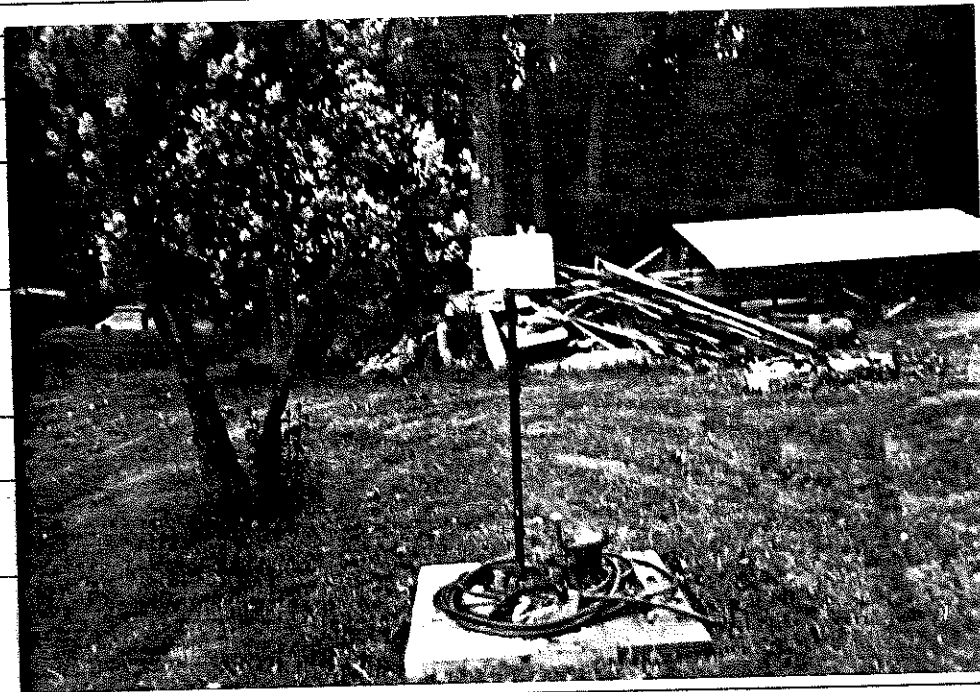
DIRECTION OF
PHOTOGRAPH:
NORTH

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
RW2



DESCRIPTION: RW2 SAMPLE LOCATION

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: SAW WEE KEE NATURE PRESERVE OSWEGO, IL

PAGE 2 OF 6

U.S. EPA ID:

TDD: T05-9104-027

PAN: EIL0739SAA

DATE: 5/9/91

TIME: 1540

DIRECTION OF
PHOTOGRAPH:
WEST

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
RW3



DESCRIPTION: RW3 SAMPLE LOCATION

DATE: 5/9/91

TIME: 1735

DIRECTION OF
PHOTOGRAPH:
WEST

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
RW4



DESCRIPTION: RW4 SAMPLE LOCATION

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: SAW WEE KEE NATURE PRESERVE OSWEGO, IL

PAGE 3 OF 6

U.S. EPA ID:

TDD: T05-9104-027

PAN: EIL0739SAA

DATE: 5/9/91

TIME: 1805

DIRECTION OF
PHOTOGRAPH:
NORTH

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
RW5



DESCRIPTION: RW5 SAMPLE LOCATION

DATE: 5/9/91

TIME: 1815

DIRECTION OF
PHOTOGRAPH:
WEST

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
RW6



DESCRIPTION: RW6 SAMPLE LOCATION

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: SAW WEE KEE NATURE PRESERVE OSWEGO, IL

PAGE 4 OF 6

U.S. EPA ID:

TDD: T05-9104-027

PAN: EIL0739SAA

DATE: 5/9/91

TIME: 1830

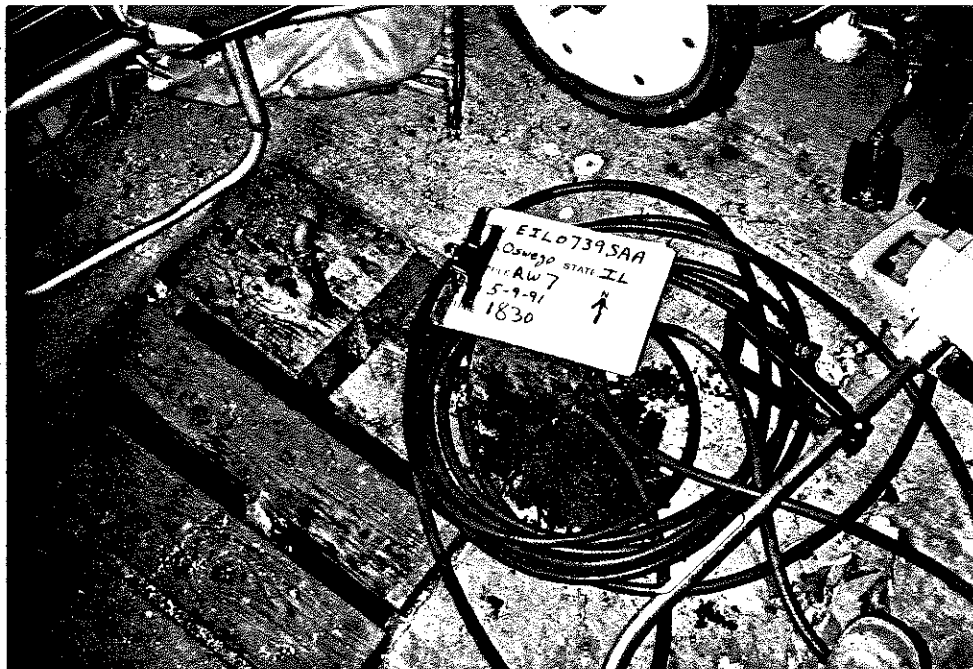
DIRECTION OF
PHOTOGRAPH:
NORTH

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
RW7



DESCRIPTION: RW7 SAMPLE LOCATION

DATE: 5/9/91

TIME: 1845

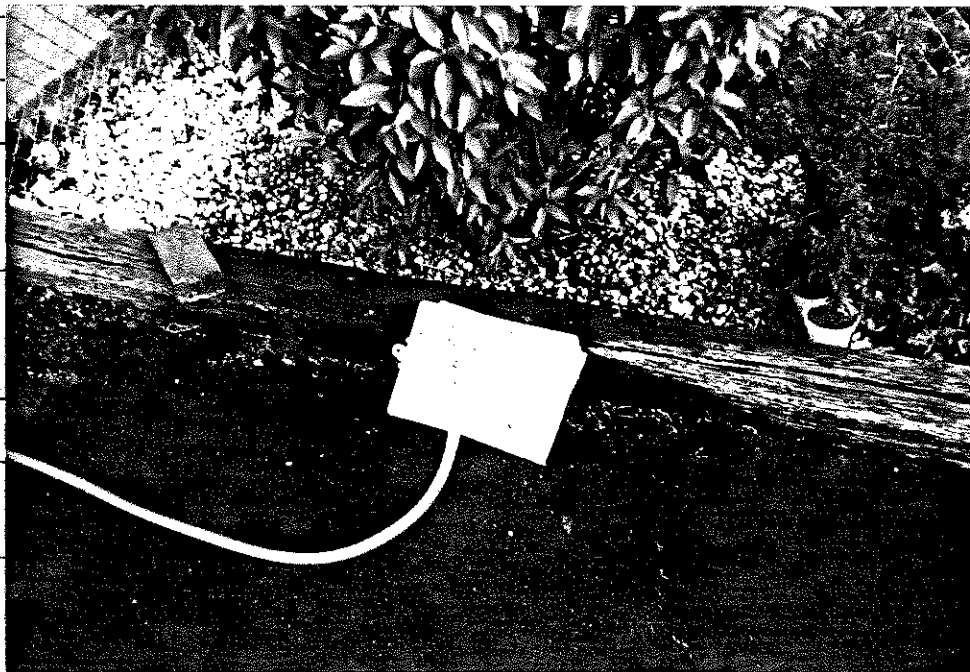
DIRECTION OF
PHOTOGRAPH:
SOUTH

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
RW8



DESCRIPTION: RW8 SAMPLE LOCATION

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: SAW WEE KEE NATURE PRESERVE OSWEGO, IL

PAGE 5 OF 6

U.S. EPA ID:

TDD: T05-9104-027

PAN: EIL0739SAA

DATE: 5/9/91

TIME: 1700

DIRECTION OF
PHOTOGRAPH:
NORTHWEST

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
SW1, SW2, SW3



DESCRIPTION: SW1, SW2, SW3 SAMPLE LOCATIONS

DATE: 5/9/91

TIME: 1630

DIRECTION OF
PHOTOGRAPH:
NORTHWEST

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
NA



DESCRIPTION: LEACHATE OUTBREAK NEAR THE FOX RIVER

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: SAW WEE KEE NATURE PRESERVE OSWEGO, IL

PAGE 6 OF 6

U.S. EPA ID:

TDD: T05-9104-027

PAN: EIL0739SAA

DATE: 5/9/91

TIME: 1630

DIRECTION OF
PHOTOGRAPH:
NORTHWEST

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
NA



DESCRIPTION: LEACHATE BREAKOUT NEAR THE FOX RIVER

DATE: 5/9/91

TIME: 1740

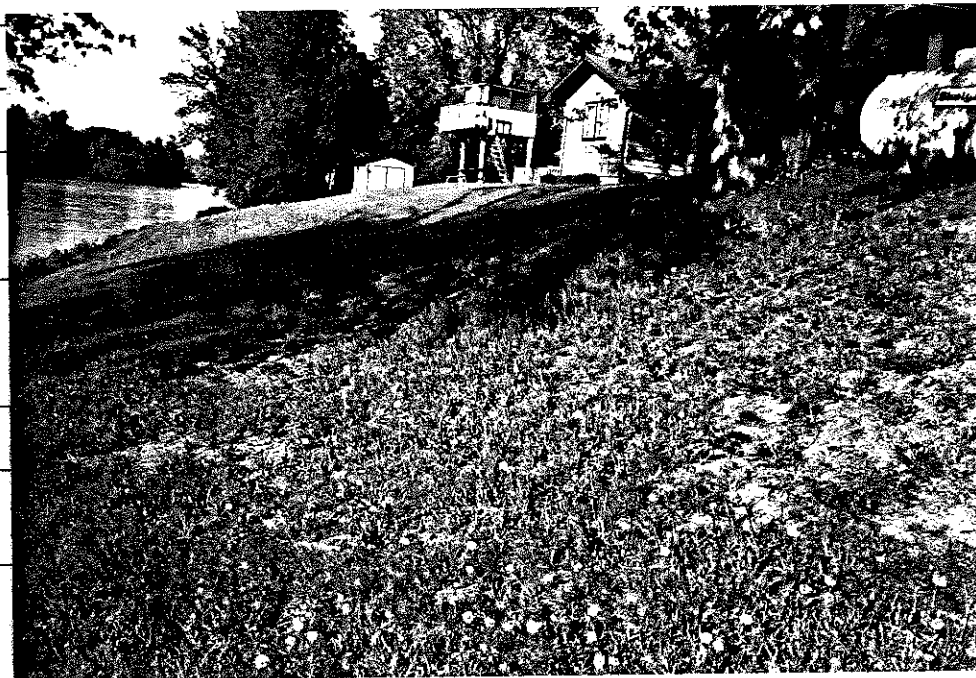
DIRECTION OF
PHOTOGRAPH:
NORTH

WEATHER
CONDITIONS:
73 F.

PARTLY CLOUDY

PHOTOGRAPHED BY:
JOHN NORDINE

SAMPLE ID
(if applicable):
NA



DESCRIPTION: STRESSED VEGETATION NEAR RW4

Appendix B

Data Quality Assurance Review Packages



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

MEMORANDUM

DATE: June 14, 1991
TO: John Nordine, Project Manager, E & E, Chicago, IL
FROM: Jane Malkin, TAT-Chemist, E & E, Chicago, IL *Jm.*
THRU: Patrick Zwilling, TAT-Chemist, E & E, Chicago, IL *PZ*
SUBJ: Organic Data Quality Assurance Review, Saw-wee-kee Nature Preserve, Oswego, Illinois

REF: Analytical TDD: T05-9104-810 Project TDD: T05-9104-027
Analytical PAN: EIL0739AAA Project PAN: EIL0739SAA

The data quality assurance review of 3 surface water samples and 8 residential well water samples collected from the Saw-wee-kee Nature Preserve site in Oswego, Illinois has been completed. Analysis for volatile organics (EPA method 8240), and semi-volatile organics (EPA 8270) were performed by Ecology & Environment, Inc., Buffalo, New York.

The 3 surface water samples were numbered SW1 through SW3, and the 8 residential well water samples were numbered RW1 through RW8.

Data Qualifications:

I Holding Time: Acceptable

The samples were collected on May 9, 1991, and they were analyzed between May 18, and May 20, 1991. This met the holding time requirement for volatiles which is 14 days. The 4 water samples, numbered RW1, RW2, RW9, and RW10 were extracted for semi-volatiles within the required 7 days from the collection date and analyzed by May 20, 1991.

II GC/MS Tuning: Acceptable

GC/MS tuning abundance criteria for Bromofluorobenzene (BFB) for volatiles and DFTPP for semi-volatiles were within the established control limits.

III Calibration

A. Initial Calibration:

A 5 point initial calibration was performed with 20, 50, 100, 150, 200 ug/ml (ppm) standards. All average response factors (RRF) were greater than 0.05 and the percent relative standard deviation between response factors was less than 30%, except for trichloroflouromethane (%RSD = 33.499) for the volatiles, and benzidine (%RSD = 79.215) for the semi-volatiles. All associated positive results for the volatiles were flagged (J) and non-detects (UJ) as estimated. Since all results for semi-volatiles were non-detect, no action was taken.

B. Continuing Calibration:

The lab performed the sample analyses between 5/18/91, and 5/20/91, with continuing calibration standards analyzed on 5/18/91 and 5/20/91. For the volatiles, all continuing calibration standards RRFs were greater than 0.05 and the percent differences (%D) from the initial calibration were less than 25 % except for the following:

Date	Compounds	%D
5/18/91	Chloromethane	34.88
	Trifluoromethane	42.61
	2,2 Dicholoropropane	36.51
	1,2 Dichloroethane D-4	47.44
	1,1,1 Trichloroethane	57.77
	Carbon Tetrachloride	73.84
	Bromodichloromethane	34.76
	Trans-1,3-Dichloropropane	30.97
	1,2,3 Trichloropropane	29.59
	Hexachlorobutadiene	26.58
5/20/91	Bromomethane	26.82

All associated positive results were flagged (J) and non-detects were flagged (UJ) as estimated.

For the semi-volatiles, all continuing calibration standards RRFs were greater than 0.05 and the percent difference (%D) from the initial calibration were less than 25% except for the following:

Date	Compound	%D
5/18/91	Benzyl Alcohol	52.24
	2,4 Dinitrophenol	64.69
	4 Nitrophenol	45.87
	4 Nitroaniline	50.04
	4,6 Dinitro-2-methyl Phenol	40.49

Since all the semi-volatile results were non-detect, no action was taken.

IV Method Blank:

A method blank was analyzed with the samples. There were no contaminants found in the blank above the instrument detection limit (IDL) except for Methylene Chloride. Since this compound is a common lab contaminant, associated results were marked as non-detects if the results were less than 10X the blank concentration.

V Surrogate Recovery: Acceptable

The percent surrogate recoveries were all within the control limits.

VI Matrix Spike/Matrix Spike Duplicates: Acceptable

The lab spiked sample numbers SW2 and RW2 for the volatile analysis and RW2 for the semi-volatile analysis. The percent recoveries of the Matrix Spike/Matrix Spike Duplicates (MS/MSD) were all within the control limits. The relative percent difference between the recoveries were all within the control limits.

VII Field Duplicates: Not applicable

VIII Internal Standards Performance: Acceptable

Internal standard (IS) area counts were all within the control limits of -50% to +100% and the IS retention times were within the +30 second control limit.

IX TCL Compound Identification: Acceptable

All positive results were identified correctly. The sample compound spectra matched the lab standard spectra with agreement of relative intensities for standards and samples within 20%.

X Compound Quantitation and Reported Detection Limits: Acceptable

Quantitation calculations were recalculated to verify accuracy. The reported sample analyte concentrations and detection limits accurately reflect concentrations, dilutions, sample weights, etc.

XI System Performance: Acceptable

No anomalies were noted in sample analysis or standard chromatograms.

VIII Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in "Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses" (February, 1988).

Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

- J - The associated numerical value is an estimated quantity because the reported concentrations were less than the contract required detection limits or quality control criteria were not met.
- U - The material was analyzed for but was not detected. The associated numerical value is the sample quantitation limit.

TEST CODE : WPURG 1

JOB NUMBER : 9101.119

Ecology and Environment, Inc.
Analytical Services CenterCLIENT : TAT- CHICAGO
TEST NAME : PURGEABLES
SAMPLE ID LAB : EE-91-11040
SAMPLE ID CLIENT: SW1
SAMPLE LOCATION :UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Chloromethane	ND		10
Bromomethane	ND		10
Vinyl Chloride	ND		10
Chloroethane	ND		10
Methylene Chloride	PRESENT	LB	5.0
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
Total-1,2-Dichloroethene	ND		5.0
Chloroform	ND		5.0
1,2-Dichloroethane	ND		5.0
1,1,1-Trichloroethane	ND		5.0
Carbon Tetrachloride	ND		5.0
Bromodichloromethane	ND		5.0
1,2-Dichloropropane	ND		5.0
trans-1,3-Dichloropropene	ND		5.0
Trichloroethene	ND		5.0
Chlorodibromomethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Benzene	ND		5.0
cis-1,3-Dichloropropene	ND		5.0
2-Chloroethylvinyl Ether	ND		10
Bromoform	ND		5.0
Tetrachloroethene	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Toluene	ND		5.0
Chlorobenzene	ND		5.0
Ethylbenzene	ND		5.0
Acetone	16		10
Carbon Disulfide	ND		5.0
2-Butanone	ND		10
Vinyl Acetate	ND		10
4-Methyl-2-Pentanone	ND		10
2-Hexanone	ND		10
Styrene	ND		5.0
Total Xylenes	ND		5.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

Final Km
6/17/91

ECOLOGY AND ENVIRONMENT, INC.

RESULTS OF WATER ANALYSIS FOR TENTATIVELY IDENTIFIED
VOLATILE ORGANIC COMPOUNDS BY GC/MS

(all results in ug/L)

9101.119

E & E Lab.
No. 91-

11040 MB1

Compound

NONE

B - Compound also detected in laboratory method blank.

** Values are approximate retention times.

TEST CODE : WPURG 1

JOB NUMBER : 9101.119

Ecology and Environment, Inc.
Analytical Services CenterCLIENT : TAT- CHICAGO
TEST NAME : PURGEABLES
SAMPLE ID LAB : EE-91-11041
SAMPLE ID CLIENT: SW2
SAMPLE LOCATION :UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Chloromethane	ND		10
Bromomethane	ND <i>u g</i>		10
Vinyl Chloride	ND		10
Chloroethane	ND		10
Methylene Chloride	PRESENT	LB	5.0
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
Total-1,2-Dichloroethene	ND		5.0
Chloroform	ND		5.0
1,2-Dichloroethane	ND		5.0
1,1,1-Trichloroethane	ND		5.0
Carbon Tetrachloride	ND		5.0
Bromodichloromethane	ND		5.0
1,2-Dichloropropane	ND		5.0
trans-1,3-Dichloropropene	ND		5.0
Trichloroethene	ND		5.0
Chlorodibromomethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Benzene	ND		5.0
cis-1,3-Dichloropropene	ND		5.0
2-Chloroethylvinyl Ether	ND		10
Bromoform	ND		5.0
Tetrachloroethene	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Toluene	ND		5.0
Chlorobenzene	ND		5.0
Ethylbenzene	ND		5.0
Acetone	12		10
Carbon Disulfide	ND		5.0
2-Butanone	ND		10
Vinyl Acetate	ND		10
4-Methyl-2-Pentanone	ND		10
2-Hexanone	ND		10
Styrene	ND		5.0
Total Xylenes	ND		5.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

Final
6/17/91

ECOLOGY AND ENVIRONMENT, INC.

RESULTS OF WATER ANALYSIS FOR TENTATIVELY IDENTIFIED
VOLATILE ORGANIC COMPOUNDS BY GC/MS

(all results in ug/L)

9101.119

E & E Lab.
No. 91-

11041 MB1

Compound

NONE

B = Compound also detected in laboratory method blank.

** Values are approximate retention times.

TEST CODE : WPURG 1

JOB NUMBER : 9101.119

Ecology and Environment, Inc.
Analytical Services CenterCLIENT : TAT- CHICAGO
TEST NAME : PURGEABLES
SAMPLE ID LAB : EE-91-11042
SAMPLE ID CLIENT: SW3
SAMPLE LOCATION :UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Chloromethane	ND		10
Bromomethane	ND <i>ag</i>		10
Vinyl Chloride	ND		10
Chloroethane	ND		10
Methylene Chloride	PRESENT	LB	5.0
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
Total-1,2-Dichloroethene	ND		5.0
Chloroform	ND		5.0
1,2-Dichloroethane	ND		5.0
1,1,1-Trichloroethane	ND		5.0
Carbon Tetrachloride	ND		5.0
Bromodichloromethane	ND		5.0
1,2-Dichloropropane	ND		5.0
trans-1,3-Dichloropropene	ND		5.0
Trichloroethene	ND		5.0
Chlorodibromomethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Benzene	ND		5.0
cis-1,3-Dichloropropene	ND		5.0
2-Chloroethylvinyl Ether	ND		10
Bromoform	ND		5.0
Tetrachloroethene	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Toluene	ND		5.0
Chlorobenzene	ND		5.0
Ethylbenzene	ND		5.0
Acetone	ND		10
Carbon Disulfide	ND		5.0
2-Butanone	ND		10
Vinyl Acetate	ND		10
4-Methyl-2-Pentanone	ND		10
2-Hexanone	ND		10
Styrene	ND		5.0
Total Xylenes	ND		5.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

g m d k w
6/17/91

ECOLOGY AND ENVIRONMENT, INC.

RESULTS OF WATER ANALYSIS FOR TENTATIVELY IDENTIFIED
VOLATILE ORGANIC COMPOUNDS BY GC/MS

(all results in ug/L)

9101.119

E & E Lab.
No. 91-

11042 MB1

Compound

NONE

B - Compound also detected in laboratory method blank.

** Values are approximate retention times.

ECOLOGY AND ENVIRONMENT'S, INC.
ANALYTICAL SERVICES CENTER

PURGEABLE ORGANIC COMPOUNDS
IN WATER
(results in ug/L)

Date Sampled : 5-09-91

9101.119

Date Analyzed: Compound	E&E Lab. No. 91-				
	11036	11037	11038	11039	11043
Compound	Date Analyzed:				
	5/20	5/20	5/20	5/20	5/20
Compound	Sample Identity				
	RW1	RW2	RW9	RW10	RW3
dichlorodifluoromethane	<2	<2	<2	<2	<2
chloromethane	<2 ug	<2 ug	<2 ug	<2 ug	<2 ug
vinyl chloride	<1	<1	<1	<1	<1
bromomethane	<2	<2	<2	<2	<2
chloroethane	<2	<2	<2	<2	<2
trichlorofluoromethane	<2 ug	<2 ug	<2 ug	<2 ug	<2 ug
1,1-dichloroethene	<1	<1	<1	<1	<1
methylene chloride	<1	<1	<1	<1	<1
trans-1,2-dichloroethene	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
cis-1,2-dichloroethene	<1	<1	<1	<1	<1
acetone	<20	<20	<20	<20	<20
chloroform	<1	0.6J	<1	<1	<1
1,1,1-trichloroethane	<2 ug	<2 ug	<2 ug	<2 ug	<2 ug
1,2-dichloroethane	<1 ug	<1 ug	<1 ug	<1 ug	<1 ug
carbon disulfide	<20	<20	<20	<20	<20
carbon tetrachloride	<1 ug	<1 ug	<1 ug	<1 ug	<1 ug
benzene	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
trichloroethene	<2	<2	<2	<2	<2
2 butanone	<10	<10	<10	<10	<10
bromodichloromethane	<1 ug	<1 ug	<1 ug	<1 ug	<1 ug
toluene	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
vinyl acetate	<10	<10	<10	<10	<10
dibromochloromethane	<1	<1	<1	<1	<1
tetrachloroethene	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	<2	<2	<2	<2	<2
chlorobenzene	<1	<1	<1	<1	<1
1,1,1,2-tetrachloroethane	<2	<2	<2	<2	<2
ethylbenzene	<1	<1	<1	<1	<1
p-xylene/m-xylene	<3	<3	<3	<3	<3
bromoform	<1	<1	<1	<1	<1
o-xylene	<1	<1	<1	<1	<1
styrene	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	<2	<2	<2	<2	<2
4-methyl-2-pentanone	<5	<5	<5	<5	<5
2-Hexanone	<10	<10	<10	<10	<10
1,2-dichlorobenzen	<1	<1	<1	<1	<1
1,3-dichlorobenzene	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1

smaller
6/17/91

ECOLOGY AND ENVIRONMENT'S, INC.
ANALYTICAL SERVICES CENTER

PURGEABLE ORGANIC COMPOUNDS
IN WATER
(results in ug/L)

Date Sampled : 5-09-91

9101.119

Date Analyzed: Compound	E&E Lab. No. 91-				
	11044	11045	11046	11047	11048
Sample Identity	Date Analyzed:				
	5/20	5/20	5/20	5/20	5/20
Sample Identity	Date Analyzed:				
	5/20	5/20	5/20	5/20	5/20
Sample Identity	RW4	RW5	RW6	RW17	RW8
dichlorodifluoromethane	<2	<2	<2	<2	<2
chloromethane	<2 ug	<2 ug	<2 ug	<2 ug	<2 ug
vinyl chloride	<1	<1	<1	<1	<1
bromomethane	<2	<2	<2	<2	<2
chloroethane	<2	<2	<2	<2	<2
trichlorofluoromethane	<2 ug	<2 ug	<2 ug	<2 ug	2.1 g
1,1-dichloroethene	<1	<1	<1	<1	<1
methylene chloride	<1	<1	<1	<1	1.4
trans-1,2-dichloroethene	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
cis-1,2-dichloroethene	<1	<1	<1	<1	<1
acetone	<20	<20	<20	<20	<20
chloroform	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<2 ug	<2 ug	<2 ug	<2 ug	<2 ug
1,2-dichloroethane	<1 ug	<1 ug	<1 ug	<1 ug	<1 ug
carbon disulfide	<20	<20	<20	<20	<20
carbon tetrachloride	<1 ug	<1 ug	<1 ug	<1 ug	<1 ug
benzene	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
trichloroethene	<2	<2	<2	<2	0.6J
2 butanone	<10	<10	<10	<10	<10
bromodichloromethane	<1 ug	<1 ug	<1 ug	<1 ug	<1 ug
toluene	<1	<1	<1	<1	2.4
1,1,2-trichloroethane	<1	<1	<1	<1	<1
vinyl acetate	<10	<10	<10	<10	<10
dibromochloromethane	<1	<1	<1	<1	<1
tetrachloroethene	<2	<2	<2	<2	<2
cis-1,3-dichloropropene	<2	<2	<2	<2	<2
chlorobenzene	<1	<1	<1	<1	<1
1,1,1,2-tetrachloroethane	<2	<2	<2	<2	<2
ethylbenzene	<1	<1	<1	<1	<1
p-xylene/m-xylene	<3	<3	<3	<3	<3
bromoform	<1	<1	<1	<1	<1
o-xylene	<1	<1	<1	<1	<1
styrene	<2	<2	<2	<2	<2
trans-1,3-dichloropropene	<2	<2	<2	<2	<2
4-methyl-2-pentanone	<5	<5	<5	<5	<5
2-Hexanone	<10	<10	<10	<10	<10
1,2-dichlorobenzen	<1	<1	<1	<1	<1
1,3-dichlorobenzene	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1

smaller
6/17/91

TEST CODE :WAPBNA1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : ACID PHENOL
SAMPLE ID LAB : EE-91-11036
SAMPLE ID CLIENT: RW1
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		10
2-Chlorophenol	ND		10
2-Nitrophenol	ND		10
2,4-Dimethylphenol	ND		10
2,4-Dichlorophenol	ND		10
4-Chloro-3-Methylphenol	ND		10
2,4,6-Trichlorophenol	ND		10
2,4-Dinitrophenol	ND		50
4-Nitrophenol	ND		50
4,6-Dinitro-2-Methylphenol	ND		50
Pentachlorophenol	ND		50
2-Methylphenol	ND		10
4-Methylphenol	ND		10
Benzoic Acid	ND		50
2,4,5-Trichlorophenol	ND		50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : WBNBNA1

JOB NUMBER : 9101.119

Ecology and Environment, Inc.
Analytical Services CenterCLIENT : TAT- CHICAGO
TEST NAME : BASE NEUTRAL
SAMPLE ID LAB : EE-91-11036
SAMPLE ID CLIENT: RW1
SAMPLE LOCATION :UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		10
1,3-Dichlorobenzene	ND		10
1,4-Dichlorobenzene	ND		10
1,2-Dichlorobenzene	ND		10
Bis(2-Chloroisopropyl)Ether	ND		10
N-Nitrosodipropylamine	ND		10
Hexachloroethane	ND		10
Nitrobenzene	ND		10
Isophorone	ND		10
Bis(2-Chloroethoxy)Methane	ND		10
1,2,4-Trichlorobenzene	ND		10
Naphthalene	ND		10
Hexachlorobutadiene	ND		10
Hexachlorocyclopentadiene	ND		10
2-Chloronaphthalene	ND		10
Dimethyl Phthalate	ND		10
Acenaphthylene	ND		10
Fluorene	ND		10
Acenaphthene	ND		10
2,4-Dinitrotoluene	ND		10
2,6-Dinitrotoluene	ND		10
Diethyl Phthalate	ND		10
4-Chlorophenyl Phenyl Ether	ND		10
N-Nitrosodiphenylamine	ND		10
4-Bromophenyl Phenyl Ether	ND		10
Hexachlorobenzene	ND		10
Phenanthrene	ND		10
Anthracene	ND		10
Di-N-Butyl-Phthalate	ND		10
Fluoranthene	ND		10
Benzidine	ND		50
Pyrene	ND		10
Butyl Benzyl Phthalate	ND		10
3,3'-Dichlorobenzidine	ND		20
Benzo(A)Anthracene	ND		10
Bis(2-Ethylhexyl)Phthalate	21	B	10
Chrysene	ND		10
Di-N-Octyl Phthalate	ND		10

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WBNBNA1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : BASE NEUTRAL
SAMPLE ID LAB : EE-91-11036
SAMPLE ID CLIENT: RW1
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzo(B)Fluoranthene	ND		10
Benzo(K)Fluoranthene	ND		10
Benzo(A)Pyrene	ND		10
Indeno(1,2,3-cd)Pyrene	ND		10
Dibenzo(A,H)Anthracene	ND		10
Benzo(G,H,I)Perlyene	ND		10
Benzyl Alcohol	ND		10
4-Chloroaniline	ND		10
2-Methylnaphthalene	ND		10
2-Nitroaniline	ND		50
3-Nitroaniline	ND		50
Dibenzofuran	ND		10
4-Nitroaniline	ND		50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

ECOLOGY AND ENVIRONMENT, INC.

RESULTS OF WATER ANALYSIS FOR TENTATIVELY IDENTIFIED
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

(all results in ug/L)

9101.119

E & E Lab.
No. 91-

11036 MB1

Compound

Unknown Hydrocarbon (21.14)	7 B
Unknown Hydrocarbon (22.52)	9 B
Unknown Hydrocarbon (23.81)	9 B
Unknown Hydrocarbon (25.07)	7 B

B = Compound also detected in laboratory method blank.

** Values are approximate retention times.

TEST CODE :WAPBNA1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : ACID PHENOL
SAMPLE ID LAB : EE-91-11037
SAMPLE ID CLIENT: RW2
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		10
2-Chlorophenol	ND		10
2-Nitrophenol	ND		10
2,4-Dimethylphenol	ND		10
2,4-Dichlorophenol	ND		10
4-Chloro-3-Methylphenol	ND		10
2,4,6-Trichlorophenol	ND		10
2,4-Dinitrophenol	ND		50
4-Nitrophenol	ND		50
4,6-Dinitro-2-Methylphenol	ND		50
Pentachlorophenol	ND		50
2-Methylphenol	ND		10
4-Methylphenol	ND		10
Benzoic Acid	ND		50
2,4,5-Trichlorophenol	ND		50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WBNBNA1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services CenterCLIENT : TAT- CHICAGO
TEST NAME : BASE NEUTRAL
SAMPLE ID LAB : EE-91-11037
SAMPLE ID CLIENT: RW2
SAMPLE LOCATION :UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		10
1,3-Dichlorobenzene	ND		10
1,4-Dichlorobenzene	ND		10
1,2-Dichlorobenzene	ND		10
Bis(2-Chloroisopropyl)Ether	ND		10
N-Nitrosodipropylamine	ND		10
Hexachloroethane	ND		10
Nitrobenzene	ND		10
Isophorone	ND		10
Bis(2-Chloroethoxy)Methane	ND		10
1,2,4-Trichlorobenzene	ND		10
Naphthalene	ND		10
Hexachlorobutadiene	ND		10
Hexachlorocyclopentadiene	ND		10
2-Chloronaphthalene	ND		10
Dimethyl Phthalate	ND		10
Acenaphthylene	ND		10
Fluorene	ND		10
Acenaphthene	ND		10
2,4-Dinitrotoluene	ND		10
2,6-Dinitrotoluene	ND		10
Diethyl Phthalate	ND		10
4-Chlorophenyl Phenyl Ether	ND		10
N-Nitrosodiphenylamine	ND		10
4-Bromophenyl Phenyl Ether	ND		10
Hexachlorobenzene	ND		10
Phenanthrene	ND		10
Anthracene	ND		10
Di-N-Butyl-Phthalate	ND		10
Fluoranthene	ND		10
Benzidine	ND		50
Pyrene	ND		10
Butyl Benzyl Phthalate	ND		10
3,3'-Dichlorobenzidine	ND		20
Benzo(A)Anthracene	ND		10
Bis(2-Ethylhexyl)Phthalate	PRESENT	LB	10
Chrysene	ND		10
Di-N-Octyl Phthalate	ND		10

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WBNBNA1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : BASE NEUTRAL
SAMPLE ID LAB : EE-91-11037
SAMPLE ID CLIENT: RW2
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzo(B)Fluoranthene	ND		10
Benzo(K)Fluoranthene	ND		10
Benzo(A)Pyrene	ND		10
Indeno(1,2,3-cd)Pyrene	ND		10
Dibenzo(A,H)Anthracene	ND		10
Benzo(G,H,I)Perlyene	ND		10
Benzyl Alcohol	ND		10
4-Chloroaniline	ND		10
2-Methylnaphthalene	ND		10
2-Nitroaniline	ND		50
3-Nitroaniline	ND		50
Dibenzofuran	ND		10
4-Nitroaniline	ND		50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

ECOLOGY AND ENVIRONMENT, INC.

RESULTS OF WATER ANALYSIS FOR TENTATIVELY IDENTIFIED
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

(all results in ug/L)

9101.119

E & E Lab.
No. 91-

11037 MB1

Compound

Unknown Hydrocarbon (21.14)	6 B
Unknown Hydrocarbon (22.52)	8 B
Unknown Hydrocarbon (23.81)	9 B
Unknown Hydrocarbon (25.07)	6 B
Sulfur, mol. (58) (25.19)	10

B = Compound also detected in laboratory method blank.

** Values are approximate retention times.

TEST CODE :WAPBNA1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : ACID PHENOL
SAMPLE ID LAB : EE-91-11038
SAMPLE ID CLIENT: RW9
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		10
2-Chlorophenol	ND		10
2-Nitrophenol	ND		10
2,4-Dimethylphenol	ND		10
2,4-Dichlorophenol	ND		10
4-Chloro-3-Methylphenol	ND		10
2,4,6-Trichlorophenol	ND		10
2,4-Dinitrophenol	ND		50
4-Nitrophenol	ND		50
4,6-Dinitro-2-Methylphenol	ND		50
Pentachlorophenol	ND		50
2-Methylphenol	ND		10
4-Methylphenol	ND		10
Benzoic Acid	ND		50
2,4,5-Trichlorophenol	ND		50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : WBNBNA1

JOB NUMBER : 9101.119

Ecology and Environment, Inc.
Analytical Services CenterCLIENT : TAT- CHICAGO
TEST NAME : BASE NEUTRAL
SAMPLE ID LAB : EE-91-11038
SAMPLE ID CLIENT: RW9
SAMPLE LOCATION :UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		10
1,3-Dichlorobenzene	ND		10
1,4-Dichlorobenzene	ND		10
1,2-Dichlorobenzene	ND		10
Bis(2-Chloroisopropyl)Ether	ND		10
N-Nitrosodipropylamine	ND		10
Hexachloroethane	ND		10
Nitrobenzene	ND		10
Isophorone	ND		10
Bis(2-Chloroethoxy)Methane	ND		10
1,2,4-Trichlorobenzene	ND		10
Naphthalene	ND		10
Hexachlorobutadiene	ND		10
Hexachlorocyclopentadiene	ND		10
2-Chloronaphthalene	ND		10
Dimethyl Phthalate	ND		10
Acenaphthylene	ND		10
Fluorene	ND		10
Acenaphthene	ND		10
2,4-Dinitrotoluene	ND		10
2,6-Dinitrotoluene	ND		10
Diethyl Phthalate	ND		10
4-Chlorophenyl Phenyl Ether	ND		10
N-Nitrosodiphenylamine	ND		10
4-Bromophenyl Phenyl Ether	ND		10
Hexachlorobenzene	ND		10
Phenanthrene	ND		10
Anthracene	ND		10
Di-N-Butyl-Phthalate	ND		10
Fluoranthene	ND		10
Benzidine	ND		50
Pyrene	ND		10
Butyl Benzyl Phthalate	ND		10
3,3'-Dichlorobenzidine	ND		20
Benzo(A)Anthracene	ND		10
Bis(2-Ethylhexyl)Phthalate	42	B	10
Chrysene	ND		10
Di-N-Octyl Phthalate	ND		10

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE : WBNBNA1

JOB NUMBER : 9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : BASE NEUTRAL
SAMPLE ID LAB : EE-91-11038
SAMPLE ID CLIENT: RW9
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzo(B)Fluoranthene	ND		10
Benzo(K)Fluoranthene	ND		10
Benzo(A)Pyrene	ND		10
Indeno(1,2,3-cd)Pyrene	ND		10
Dibenzo(A,H)Anthracene	ND		10
Benzo(G,H,I)Perlyene	ND		10
Benzyl Alcohol	ND		10
4-Chloroaniline	ND		10
2-Methylnaphthalene	ND		10
2-Nitroaniline	ND		50
3-Nitroaniline	ND		50
Dibenzofuran	ND		10
4-Nitroaniline	ND		50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

ECOLOGY AND ENVIRONMENT, INC.

RESULTS OF WATER ANALYSIS FOR TENTATIVELY IDENTIFIED
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

(all results in ug/L)

9101.119

E & E Lab.
No. 91-

11038 MB1

Compound

Unknown Hydrocarbon (23.82)

6 B

B = Compound also detected in laboratory method blank.

** Values are approximate retention times.

TEST CODE :WAPBNA1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : ACID PHENOL
SAMPLE ID LAB : EE-91-11039
SAMPLE ID CLIENT: RW10
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Phenol	ND		10
2-Chlorophenol	ND		10
2-Nitrophenol	ND		10
2,4-Dimethylphenol	ND		10
2,4-Dichlorophenol	ND		10
4-Chloro-3-Methylphenol	ND		10
2,4,6-Trichlorophenol	ND		10
2,4-Dinitrophenol	ND		50
4-Nitrophenol	ND		50
4,6-Dinitro-2-Methylphenol	ND		50
Pentachlorophenol	ND		50
2-Methylphenol	ND		10
4-Methylphenol	ND		10
Benzoic Acid	ND		50
2,4,5-Trichlorophenol	ND		50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WBNBNA1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services CenterCLIENT : TAT- CHICAGO
TEST NAME : BASE NEUTRAL
SAMPLE ID LAB : EE-91-11039
SAMPLE ID CLIENT: RW10
SAMPLE LOCATION :UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Bis(2-Chloroethyl)Ether	ND		10
1,3-Dichlorobenzene	ND		10
1,4-Dichlorobenzene	ND		10
1,2-Dichlorobenzene	ND		10
Bis(2-Chloroisopropyl)Ether	ND		10
N-Nitrosodipropylamine	ND		10
Hexachloroethane	ND		10
Nitrobenzene	ND		10
Isophorone	ND		10
Bis(2-Chloroethoxy)Methane	ND		10
1,2,4-Trichlorobenzene	ND		10
Naphthalene	ND		10
Hexachlorobutadiene	ND		10
Hexachlorocyclopentadiene	ND		10
2-Chloronaphthalene	ND		10
Dimethyl Phthalate	ND		10
Acenaphthylene	ND		10
Fluorene	ND		10
Acenaphthene	ND		10
2,4-Dinitrotoluene	ND		10
2,6-Dinitrotoluene	ND		10
Diethyl Phthalate	ND		10
4-Chlorophenyl Phenyl Ether	ND		10
N-Nitrosodiphenylamine	ND		10
4-Bromophenyl Phenyl Ether	ND		10
Hexachlorobenzene	ND		10
Phenanthrene	ND		10
Anthracene	ND		10
Di-N-Butyl-Phthalate	ND		10
Fluoranthene	ND		10
Benzidine	ND		50
Pyrene	ND		10
Butyl Benzyl Phthalate	ND		10
3,3'-Dichlorobenzidine	ND		20
Benzo(A)Anthracene	ND		10
Bis(2-Ethylhexyl)Phthalate	ND		10
Chrysene	ND		10
Di-N-Octyl Phthalate	ND		10

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WBNBNA1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : BASE NEUTRAL
SAMPLE ID LAB : EE-91-11039
SAMPLE ID CLIENT: RW10
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Benzo(B)Fluoranthene	ND		10
Benzo(K)Fluoranthene	ND		10
Benzo(A)Pyrene	ND		10
Indeno(1,2,3-cd)Pyrene	ND		10
Dibenzo(A,H)Anthracene	ND		10
Benzo(G,H,I)Perlyene	ND		10
Benzyl Alcohol	ND		10
4-Chloroaniline	ND		10
2-Methylnaphthalene	ND		10
2-Nitroaniline	ND		50
3-Nitroaniline	ND		50
Dibenzofuran	ND		10
4-Nitroaniline	ND		50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

ECOLOGY AND ENVIRONMENT, INC.

RESULTS OF WATER ANALYSIS FOR TENTATIVELY IDENTIFIED
SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

(all results in ug/L)

9101.119

E & E Lab.
No. 91-

11039 MB1

Compound

Unknown Hydrocarbon (22.51)	4 B
Unknown Hydrocarbon (23.82)	4 B

B = Compound also detected in laboratory method blank.

** Values are approximate retention times.



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

MEMORANDUM

DATE: June 17, 1991
TO: John Nordine, Project Manager, E & E, Chicago, IL
FROM: Jane Malkin, TAT-Chemist, E & E, Chicago, IL *jm*
THRU: Patrick Zwilling, TAT-Chemist, E & E, Chicago, IL *PZ*
SUBJ: Pesticide/PCB Data Quality Assurance Review, Saw-wee-kee
Nature Preserve, Oswego, Illinois

REF: Analytical TDD: T05-9104-810 Project TDD: T05-9104-027
Analytical PAN: EIL0739AAA Project PAN: EIL0739SAA

The data quality assurance review of 4 residential well water samples, and 3 surface water samples collected from the Saw-wee-kee Nature Preserve site in Oswego, Illinois has been completed. Analysis for PCB/Pesticide (EPA method 8080) was performed by Ecology & Environment, Inc., Buffalo, New York.

The 4 residential well samples were numbered, RW1, RW2, RW9, and RW10, and the 3 surface water samples were numbered, SW1, SW2, and SW3.

Data Qualifications:

I Sample Holding Time:

All the samples were extracted within the limit holding time for PCB/Pesticide, except for sample number, SW3. All the extracts were analyzed by May 22, 1991. Since no positive values were reported on all the samples, no action was taken.

II Pesticide Instrument Performance:

1. DDT Retention Time: Acceptable

Standard analyses for the DDT produced retention times greater than the 12 minute control limit.

2. Retention Time Windows: Data not available

III Calibration

A. Initial Calibration: Acceptable

The percent relative standard deviation (%RSD) of calibration factors for aldrin, endrin and DDT were all below the control limit of 10%.

B. Continuing Calibration: Acceptable

The established quality control criteria for the percent difference (%D) between initial calibration factor and continuing calibration factor is less than 15% for the compound being quantitated.

IV Method Blank: Acceptable

The lab analyzed one method blank for the analysis of the residential well sample and another method blank for the surface water samples. All the results were below the instrument detection limit.

V Surrogate Recoveries:

The percent surrogate recoveries for DBC from the 4 residential well water samples exceeded the control limit of 150%. Since no positive results were reported, no action was taken. The percent recoveries for Hexabromobenzene from the 3 surface water samples were all within the control limits.

VI Matrix Spike/Matrix Spike Duplicate: Acceptable

The lab spiked sample numbers, RW2 and SW1. The percent recoveries of matrix spike and matrix spike duplicate were all within the control limits which is 38 - 131% for water. The relative percent difference between the recoveries were all within the control limits which is less than 21% for water.

VII Field Duplicates: Not applicable

VIII Compound Identification: Acceptable

A review of the data insured that the compounds listed as "not detected" are correct.

IX Compound Quantitation and Reported Detection Limits:

A 10% of the data were recalculated to verify the quantitation calculations. The reported detection limits reflect concentrations, dilutions, sample weights. etc.

X Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in "Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses" section on "Pesticides Procedure" (February, 1988).

Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

TEST CODE : WPCB 1

JOB NUMBER : 9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : PCB
SAMPLE ID LAB : EE-91-11040
SAMPLE ID CLIENT: SW1

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
PCB-1016	ND		0.50
PCB-1242	ND		0.50
PCB-1254	ND		0.50
PCB-1221	ND		0.50
PCB-1232	ND		0.50
PCB-1248	ND		0.50
PCB-1260	ND		0.50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WPCB 1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : PCB
SAMPLE ID LAB : EE-91-11041
SAMPLE ID CLIENT: SW2

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
PCB-1016	ND		0.50
PCB-1242	ND		0.50
PCB-1254	ND		0.50
PCB-1221	ND		0.50
PCB-1232	ND		0.50
PCB-1248	ND		0.50
PCB-1260	ND		0.50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WPCB 1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : PCB
SAMPLE ID LAB : EE-91-11042
SAMPLE ID CLIENT: SW3

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	ONT. LIMIT
PCB-1016	ND		0.50
PCB-1242	ND		0.50
PCB-1254	ND		0.50
PCB-1221	ND		0.50
PCB-1232	ND		0.50
PCB-1248	ND		0.50
PCB-1260	ND		0.50

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WP&PCB1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : PESTICIDE-PCB
SAMPLE ID LAB : EE-91-11036
SAMPLE ID CLIENT: RW1
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Aldrin	ND		0.025
alpha-BHC	ND		0.025
beta-BHC	ND		0.025
gamma-BHC (Lindane)	ND		0.025
delta-BHC	ND		0.025
Chlordane	ND		0.20
4,4'-DDD	ND		0.050
4,4'-DDE	ND		0.050
4,4'-DDT	ND		0.10
Dieldrin	ND		0.050
Endosulfan I	ND		0.050
Endosulfan II	ND		0.050
Endosulfan Sulfate	ND		0.10
Endrin	ND		0.050
Endrin Aldehyde	ND		0.10
Heptachlor	ND		0.025
Heptachlor Epoxide	ND		0.050
PCB-1016	ND		0.50
PCB-1221	ND		0.50
PCB-1232	ND		0.50
PCB-1242	ND		0.50
PCB-1248	ND		0.50
PCB-1254	ND		0.50
PCB-1260	ND		0.50
Toxaphene	ND		1.0
Methoxychlor	ND		0.40

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WP&PCB1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : PESTICIDE-PCB
SAMPLE ID LAB : EE-91-11037
SAMPLE ID CLIENT: RW2
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Aldrin	ND		0.025
alpha-BHC	ND		0.025
beta-BHC	ND		0.025
gamma-BHC (Lindane)	ND		0.025
delta-BHC	ND		0.025
Chlordane	ND		0.20
4,4'-DDD	ND		0.050
4,4'-DDE	ND		0.050
4,4'-DDT	ND		0.10
Dieldrin	ND		0.050
Endosulfan I	ND		0.050
Endosulfan II	ND		0.050
Endosulfan Sulfate	ND		0.10
Endrin	ND		0.050
Endrin Aldehyde	ND		0.10
Heptachlor	ND		0.025
Heptachlor Epoxide	ND		0.050
PCB-1016	ND		0.50
PCB-1221	ND		0.50
PCB-1232	ND		0.50
PCB-1242	ND		0.50
PCB-1248	ND		0.50
PCB-1254	ND		0.50
PCB-1260	ND		0.50
Toxaphene	ND		1.0
Methoxychlor	ND		0.40

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WP&PCB1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : PESTICIDE-PCB
SAMPLE ID LAB : EE-91-11038
SAMPLE ID CLIENT: RW9
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Aldrin	ND		0.025
alpha-BHC	ND		0.025
beta-BHC	ND		0.025
gamma-BHC (Lindane)	ND		0.025
delta-BHC	ND		0.025
Chlordane	ND		0.20
4,4'-DDD	ND		0.050
4,4'-DDE	ND		0.050
4,4'-DDT	ND		0.10
Dieldrin	ND		0.050
Endosulfan I	ND		0.050
Endosulfan II	ND		0.050
Endosulfan Sulfate	ND		0.10
Endrin	ND		0.050
Endrin Aldehyde	ND		0.10
Heptachlor	ND		0.025
Heptachlor Epoxide	ND		0.050
PCB-1016	ND		0.50
PCB-1221	ND		0.50
PCB-1232	ND		0.50
PCB-1242	ND		0.50
PCB-1248	ND		0.50
PCB-1254	ND		0.50
PCB-1260	ND		0.50
Toxaphene	ND		1.0
Methoxychlor	ND		0.40

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WP&PCB1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : PESTICIDE-PCB
SAMPLE ID LAB : EE-91-11039
SAMPLE ID CLIENT: RW10
SAMPLE LOCATION :

UNITS : UG/L
MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Aldrin	ND		0.025
alpha-BHC	ND		0.025
beta-BHC	ND		0.025
gamma-BHC (Lindane)	ND		0.025
delta-BHC	ND		0.025
Chlordane	ND		0.20
4,4'-DDD	ND		0.050
4,4'-DDE	ND		0.050
4,4'-DDT	ND		0.10
Dieldrin	ND		0.050
Endosulfan I	ND		0.050
Endosulfan II	ND		0.050
Endosulfan Sulfate	ND		0.10
Endrin	ND		0.050
Endrin Aldehyde	ND		0.10
Heptachlor	ND		0.025
Heptachlor Epoxide	ND		0.050
PCB-1016	ND		0.50
PCB-1221	ND		0.50
PCB-1232	ND		0.50
PCB-1242	ND		0.50
PCB-1248	ND		0.50
PCB-1254	ND		0.50
PCB-1260	ND		0.50
Toxaphene	ND		1.0
Methoxychlor	ND		0.40

QUALIFIERS: C = COMMENT ND = NOT DETECTED
 J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
 L = PRESENT BELOW STATED DETECTION LIMIT



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

MEMORANDUM

DATE: June 14, 1991
TO: John Nordine, Project Manager, E & E, Chicago, IL
FROM: Jane Malkin, TAT-Chemist, E & E, Chicago, IL *jm*
THRU: Patrick Zwilling, TAT-Chemist, E & E, Chicago, IL *PZ*
SUBJ: Inorganic Data Quality Assurance Review, Saw-wee-kee Nature Preserve, Oswego, Illinois

REF: Analytical TDD: T05-9104-810 Project TDD: T05-9104-027
Analytical PAN: EIL0739AAA Project PAN: EIL0739SAA

The data quality assurance review of 4 residential well water samples collected from the Saw-wee-kee Nature Preserve site in Oswego, Illinois has been completed. Analysis for total metals by ICP and AA, and cyanides by spectrophotometric method was performed by Ecology & Environment, Inc., Buffalo, New York.

The 4 residential water samples were numbered: RW1, RW2, RW9, RW10.

Data Qualifications:

I Sample Holding Time: Acceptable

The samples were collected on May 9, 1991, and they were analyzed by June 3, 1991. This met the holding time requirement for metals which is 6 months, and for mercury which is 28 days. The total cyanides were analyzed on May 21, 1991 which met the holding time requirement of 14 days for cyanides.

II Calibration

A. Initial Calibration and Calibration Verification: Acceptable

Initial calibration was performed with a blank and one standard. All the results were within 90 - 110% of the true standard value. No contamination above the instrument detection limit (IDL) was detected in the initial calibration blank.

B. Continuing Calibration: Acceptable

All continuing calibration results were within the control limit of 90 - 110% for the metals, and 85 - 115% for cyanides. No contamination above the IDL was detected in the continuing calibration blank.

III Blanks: Acceptable

Method blanks were prepared and analyzed each day with the samples. No contamination above the IDL was detected.

IV Interference Check Sample Analysis: Acceptable

All percent recoveries for the metals and cyanides in the interference check sample (ICS) analysis were within the control limits of 80 - 120%.

V Laboratory Control Sample Analysis: Acceptable

All laboratory control sample analysis results were within the 80 - 120% recovery control limit.

VI Specific Sample Results

A. Duplicate Sample Analysis:

The Relative Percent Difference (RPD) was within the limit of 65 - 135% with the exception of lead. All associated positive results were flagged (J) as estimated.

B. Spike Sample Analysis:

The percent spike recoveries were within the control limit of 75 - 125% with the exception of selenium and thallium. All associated positive results were flagged (J) as estimated.

VII ICP Serial Dilution:

The ICP dilution percent difference (%D) were within the control limit of 10% except for aluminum, cobalt, iron, manganese, and vanadium. All associated positive results were flagged (J).

VII Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in "Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses".

Based upon the information provided, the data are acceptable for use with the above stated data qualifications.

Data Qualifiers and Definitions

- J - The associated numerical value is an estimated quantity because the reported concentrations were less than the contract required detection limits or quality control criteria were not met.

TEST CODE :WO&GIR1

JOB NUMBER :9101.119

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : TAT- CHICAGO
TEST NAME : OIL & GREASE
PARAMETER : Oil & Grease

UNITS : MG/L

SAMPLE ID	RESULTS	Q	QNT. LIMIT
EE-91-11040 SW1	ND		1.0
EE-91-11041 SW2	ND		1.0
EE-91-11042 SW3	1.9		1.0

METHOD BLANK	ND	1.0
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QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT
NA = NOT APPLICABLE

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW1

Name: ECOLOGY_AND_ENVIRONMENT Contract: _____

Code: EANDE Case No.: 9101.119 SAS No.: _____ SDG No.: RW1

Matrix (soil/water): WATER

Lab Sample ID: 11036

pH (low/med): LOW

Date Received: 05/13/91

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	141	B	2	P
7440-36-0	Antimony	33.0	U	7	P
7440-38-2	Arsenic	2.0	U	N	F
7440-39-3	Barium	34.9	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	54000			P
7440-47-3	Chromium	9.0	U		P
7440-48-4	Cobalt	10.1	B	8	P
7440-50-8	Copper	2.0	U	9	P
7439-89-6	Iron	255		8 E	P
7439-92-1	Lead	1.0	U	8 W*	F
7439-95-4	Magnesium	28100			P
7439-96-5	Manganese	5.3	B	8	P
7439-97-6	Mercury	0.20	U	8	CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	16700			P
7782-49-2	Selenium	2.0	U	8 WN	F
7440-22-4	Silver	3.0	U	8	P
7440-23-5	Sodium	40100			P
7440-28-0	Thallium	15.0	U	8 N	F
7440-62-2	Vanadium	5.7	B	8	P
7440-66-6	Zinc	55.9		8	P
	Cyanide	10.0	U		AS

J. Mackin
6/17/91

Color Before: CL _____ Clarity Before: C _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW10

Name: ECOLOGY_AND_ENVIRONMENT Contract: _____

Code: EANDE Case No.: 9101.119 SAS No.: _____ SDG No.: RW1

Matrix (soil/water): WATER

Lab Sample ID: 11039

pH (low/med): LOW

Date Received: 05/13/91

Sulphides: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.0	U	✓	P
7440-36-0	Antimony	33.0	U		P
7440-38-2	Arsenic	2.0	U	N	F
7440-39-3	Barium	5.0	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	95.0	U		P
7440-47-3	Chromium	9.0	U		P
7440-48-4	Cobalt	5.5	B	✓	P
7440-50-8	Copper	2.0	U		P
7439-89-6	Iron	20.9	B	✓	P
7439-92-1	Lead	1.0	U	✓*	F
7439-95-4	Magnesium	108	U		P
7439-96-5	Manganese	1.0	U		P
7439-97-6	Mercury	0.20	U	✓	CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	263	U		P
7782-49-2	Selenium	2.0	U	N	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	335	U		P
7440-28-0	Thallium	3.0	U	N	F
7440-62-2	Vanadium	4.4	B	✓	P
7440-66-6	Zinc	3.2	B	✓	P
	Cyanide	10.0	U		AS

Jmal
6/17/91

Color Before: CL Clarity Before: C Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW2

b Name: ECOLOGY_AND_ENVIRONMENT Contract: _____

Code: EANDE Case No.: 9101.119 SAS No.: _____ SDG No.: RW1

Matrix (soil/water): WATER

Lab Sample ID: 11037

Level (low/med): LOW

Date Received: 05/13/91

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	70.5	B		P
7440-36-0	Antimony	33.0	U		P
7440-38-2	Arsenic	2.0	U	WN	F
7440-39-3	Barium	24.5	B		P
7440-41-7	Beryllium	9.5			P
7440-43-9	Cadmium	4.4	B		P
7440-70-2	Calcium	20400			P
7440-47-3	Chromium	9.0	U		P
7440-48-4	Cobalt	7.9	B		P
7440-50-8	Copper	2.0	U		P
7439-89-6	Iron	50.0	B	E	P
7439-92-1	Lead	1.3	B	W*	F
7439-95-4	Magnesium	10900			P
7439-96-5	Manganese	3.6	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	12900			P
7782-49-2	Selenium	2.0	U	WN	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	148000			P
7440-28-0	Thallium	15.0	U	N	F
7440-62-2	Vanadium	5.7	B		P
7440-66-6	Zinc	219			P
	Cyanide	10.0	U		AS

J malin
6/17/91

Color Before: CL

Clarity Before: C

Texture: _____

Color After: _____

Clarity After: _____

Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

RW9

Name: ECOLOGY_AND_ENVIRONMENT Contract: _____

Code: EANDE Case No.: 9101.119 SAS No.: _____ SDG No.: RW1

Matrix (soil/water): WATER Lab Sample ID: 11038

Level (low/med): LOW Date Received: 05/13/91

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	56.7	B		P
7440-36-0	Antimony	33.0	U		P
7440-38-2	Arsenic	2.0	U	WN	F
7440-39-3	Barium	34.6	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	54100			P
7440-47-3	Chromium	9.0	U		P
7440-48-4	Cobalt	9.5	B		P
7440-50-8	Copper	2.0	U		P
7439-89-6	Iron	255		E	P
7439-92-1	Lead	1.0	U	W*	F
7439-95-4	Magnesium	28100			P
7439-96-5	Manganese	4.9	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	8.0	U		P
7440-09-7	Potassium	16800			P
7782-49-2	Selenium	2.0	U	WN	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	38800			P
7440-28-0	Thallium	15.0	U	WN	F
7440-62-2	Vanadium	7.8	B		P
7440-66-6	Zinc	59.3			P
	Cyanide	10.0	U		AS

Small k w.
6/17/91

Color Before: CL _____ Clarity Before: C _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
CHAIN OF CUSTODY

I certify that the samples listed below were collected in my presence and that each sample bottle was sealed intact by me and that I wrote my initials and the date on the seal of each bottle.

Site Inventory No. 0938070003

County Kendall

Federal I.D. No. none

Saw-Wee-Keo Nature Preserve
(Facility Name)

SAMPLING TEAM

Sample No.	Initials	Consisting of the Indicated No. of Bottles	Date Collected	Time Sealed
X203	MG	2	3/7/91	11 ³⁰ AM/PM
XXXX	XXXXXXXXXX	2		XXXX AM/PM

Sealer's Signature Mary C. Hahn

Date 3/7/91

Time 11³⁰ AM/PM

Sampler(s) Mary C. Hahn

I certify I received the above samples, with each seal on each bottle intact and the sealer's initials written on each sample seal.

CARRIERS

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time
<u>Mary C. Hahn</u>	<u>3/7/91</u>	<u>2⁰⁰</u> AM/PM			

LAB STUDIAN

I certify I received the above samples with each seal on each bottle intact, and the sealer's initials written on each sample seal. After recording these samples in the official record book, these same samples will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature Harry J. Parks

Date 3-7-91

Time 2:00 A.M. P.M.

Lab Location Chicago (City)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LAND POLLUTION CONTROL
CHAIN OF CUSTODY

I certify that the samples listed below were collected in my presence and that each sample bottle was sealed intact by me and that I wrote my initials and the date on the seal of each bottle.

Site Inventory No. 0938070003

County Kendall

Federal I.D. No. none
Saw-Wee-Kee Nature Preserve
(Facility Name)

SAMPLING TEAM

Sample No.	Initials	Consisting of the Indicated No. of Bottles	Date Collected	Time Sealed
<u>X2003</u>	<u>MG</u>	<u>2</u>	<u>3/7/91</u>	<u>11²⁰</u> <u>(AM)</u> PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM
				AM/PM

Sealer's Signature Mary E. Hahn

Date 3/7/91

Time 11³⁰ (AM)PM

Sampler(s) Mary E. Hahn

I certify I received the above samples, with each seal on each bottle intact and the sealer's initials written on each sample seal.

CARRIERS

Relinquished By (Signature)	Date	Time	Received By (Signature)	Date	Time
<u>Mary E. Hahn</u>	<u>3/7/91</u>	<u>2⁰⁰</u> AM/PM	<u>Kimberly J. Banks</u>	<u>3-7-91</u>	<u>2:00</u> AM/PM
<u>CMS MESSENGER SERVICE</u>	<u>3-8-91</u>	<u>2:50</u> AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM
		AM/PM			AM/PM

LAB CUSTODIAN

I certify I received the above samples with each seal on each bottle intact, and the sealer's initials written on each sample seal. After recording these samples in the official record book, these same samples will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature _____ Date _____ Time _____ A.M. P.M.

Lab Location _____ (City)